

Appendix

Table 3

REMARK coordinates from minimization refinement  
REMARK refinement resolution: 100.0 - 3.2 Å  
REMARK starting r= 0.3631 free\_r= 0.4208  
REMARK final r= 0.3466 free\_r= 0.4154  
REMARK rmsd bonds= 0.009443 rmsd angles= 1.93913  
REMARK wa= 16.2281  
REMARK target= mlf cycles= 1 steps= 250  
REMARK sg= P4(1)2(1)2 a= 200.76 b= 200.76 c= 292.938 alpha= 90 beta= 90 gamma= 90  
REMARK parameter file 1 : CNS\_TOPPAR:protein\_rep.param  
REMARK parameter file 2 : CNS\_TOPPAR:ion.param  
REMARK molecular structure file: ../pdb/rnap\_m3\_gen.mtf  
REMARK input coordinates: ../bgroup/bgl.pdb  
REMARK reflection file= ../fobs/scale\_b25.cv  
REMARK ncs= restrain ncs file= ../ncs100.def  
REMARK B-correction resolution: 8.0 - 3.2  
REMARK initial B-factor correction applied to f\_scale :  
REMARK B11= 0.112 B22= 0.112 B33= -0.224  
REMARK B12= 0.000 B13= 0.000 B23= 0.000  
REMARK B-factor correction applied to coordinate array B: 0.067  
REMARK bulk solvent: density level= 0.315481 e/Å<sup>3</sup>, B-factor= 300 Å<sup>2</sup>  
REMARK reflections with |Fobs|/sigma\_F < 0.0 rejected  
REMARK reflections with |Fobs| > 10000 \* rms(Fobs) rejected  
REMARK theoretical total number of refl. in resol. range: 98907 ( 100.0 % )  
REMARK number of unobserved reflections (no entry or |F|=0): 5201 ( 5.3 % )  
REMARK number of reflections rejected: 0 ( 0.0 % )  
REMARK total number of reflections used: 93706 ( 94.7 % )  
REMARK number of reflections in working set: 88974 ( 90.0 % )  
REMARK number of reflections in test set: 4732 ( 4.8 % )  
CRYST1 200.760 200.760 292.938 90.00 90.00 90.00 P 41 21 2  
REMARK FILENAME="min1\_100-3.2.pdb"  
REMARK VERSION:0.4a

ATOM	1	CB	ALA	A	6	1.632	67.447	73.985	1.00	51.08	A
ATOM	2	C	ALA	A	6	1.498	65.047	73.318	1.00	100.07	A
ATOM	3	O	ALA	A	6	2.714	64.811	73.324	1.00	100.07	A
ATOM	4	N	ALA	A	6	1.065	65.705	75.679	1.00	100.07	A
ATOM	5	CA	ALA	A	6	0.907	66.105	74.245	1.00	100.07	A
ATOM	6	N	ALA	A	7	0.639	64.425	72.515	1.00	85.24	A
ATOM	7	CA	ALA	A	7	1.075	63.413	71.564	1.00	85.24	A
ATOM	8	CB	ALA	A	7	1.051	62.030	72.216	1.00	14.75	A
ATOM	9	C	ALA	A	7	0.130	63.450	70.380	1.00	85.24	A
ATOM	10	O	ALA	A	7	-0.677	64.368	70.252	1.00	85.24	A
ATOM	11	N	ALA	A	8	0.242	62.448	69.519	1.00	100.07	A
ATOM	12	CA	ALA	A	8	-0.605	62.342	68.340	1.00	100.07	A
ATOM	13	CB	ALA	A	8	-1.848	61.513	68.673	1.00	100.07	A
ATOM	14	C	ALA	A	8	-1.025	63.704	67.786	1.00	100.07	A
ATOM	15	O	ALA	A	8	-2.031	64.276	68.207	1.00	100.07	A
ATOM	16	N	PRO	A	9	-0.248	64.248	66.841	1.00	56.97	A
ATOM	17	CD	PRO	A	9	1.082	63.783	66.416	1.00	100.07	A
ATOM	18	CA	PRO	A	9	-0.561	65.545	66.236	1.00	56.97	A
ATOM	19	CB	PRO	A	9	0.774	65.969	65.640	1.00	100.07	A
ATOM	20	CG	PRO	A	9	1.355	64.665	65.227	1.00	100.07	A
ATOM	21	C	PRO	A	9	-1.661	65.430	65.188	1.00	56.97	A
ATOM	22	O	PRO	A	9	-2.702	64.838	65.445	1.00	56.97	A
ATOM	23	N	VAL	A	10	-1.419	65.997	64.011	1.00	83.69	A
ATOM	24	CA	VAL	A	10	-2.377	65.972	62.907	1.00	83.69	A
ATOM	25	CB	VAL	A	10	-3.291	67.218	62.930	1.00	46.48	A
ATOM	26	CG1	VAL	A	10	-4.123	67.287	61.657	1.00	46.48	A
ATOM	27	CG2	VAL	A	10	-4.196	67.180	64.147	1.00	46.48	A
ATOM	28	C	VAL	A	10	-1.555	66.004	61.625	1.00	83.69	A
ATOM	29	O	VAL	A	10	-0.401	66.437	61.637	1.00	83.69	A
ATOM	30	N	PHE	A	11	-2.129	65.546	60.519	1.00	35.63	A
ATOM	31	CA	PHE	A	11	-1.393	65.576	59.273	1.00	35.63	A
ATOM	32	CB	PHE	A	11	-0.988	64.172	58.831	1.00	100.07	A
ATOM	33	CG	PHE	A	11	0.221	64.162	57.943	1.00	100.07	A
ATOM	34	CD1	PHE	A	11	1.403	64.764	58.368	1.00	100.07	A
ATOM	35	CD2	PHE	A	11	0.178	63.597	56.674	1.00	100.07	A
ATOM	36	CE1	PHE	A	11	2.521	64.808	57.545	1.00	100.07	A
ATOM	37	CE2	PHE	A	11	1.297	63.635	55.838	1.00	100.07	A
ATOM	38	CZ	PHE	A	11	2.470	64.244	56.277	1.00	100.07	A
ATOM	39	C	PHE	A	11	-2.180	66.268	58.168	1.00	35.63	A
ATOM	40	O	PHE	A	11	-2.207	65.819	57.012	1.00	35.63	A
ATOM	41	N	THR	A	12	-2.821	67.371	58.546	1.00	60.55	A
ATOM	42	CA	THR	A	12	-3.590	68.189	57.615	1.00	60.55	A
ATOM	43	CB	THR	A	12	-3.781	69.612	58.175	1.00	100.07	A
ATOM	44	OG1	THR	A	12	-4.149	69.541	59.557	1.00	100.07	A
ATOM	45	CG2	THR	A	12	-4.858	70.350	57.402	1.00	100.07	A
ATOM	46	C	THR	A	12	-2.728	68.294	56.363	1.00	60.55	A

ATOM	47	O	THR	A	12	-1.609	68.785	56.430	1.00	60.55	A
ATOM	48	N	ALA	A	13	-3.227	67.855	55.218	1.00	47.73	A
ATOM	49	CA	ALA	A	13	-2.390	67.910	54.029	1.00	47.73	A
ATOM	50	CB	ALA	A	13	-1.906	66.489	53.705	1.00	36.60	A
ATOM	51	C	ALA	A	13	-2.941	68.571	52.760	1.00	47.73	A
ATOM	52	O	ALA	A	13	-2.799	68.003	51.683	1.00	47.73	A
ATOM	53	N	THR	A	14	-3.530	69.764	52.861	1.00	59.31	A
ATOM	54	CA	THR	A	14	-4.067	70.450	51.671	1.00	59.31	A
ATOM	55	CB	THR	A	14	-4.181	72.005	51.888	1.00	61.51	A
ATOM	56	OG1	THR	A	14	-5.094	72.296	52.959	1.00	61.51	A
ATOM	57	CG2	THR	A	14	-4.686	72.684	50.617	1.00	61.51	A
ATOM	58	C	THR	A	14	-3.168	70.184	50.447	1.00	59.31	A
ATOM	59	O	THR	A	14	-2.124	70.818	50.290	1.00	59.31	A
ATOM	60	N	THR	A	15	-3.586	69.255	49.582	1.00	99.60	A
ATOM	61	CA	THR	A	15	-2.809	68.870	48.396	1.00	99.60	A
ATOM	62	CB	THR	A	15	-3.093	67.393	47.999	1.00	63.08	A
ATOM	63	OG1	THR	A	15	-2.281	67.041	46.875	1.00	63.08	A
ATOM	64	CG2	THR	A	15	-4.566	67.188	47.645	1.00	63.08	A
ATOM	65	C	THR	A	15	-2.928	69.749	47.139	1.00	99.60	A
ATOM	66	O	THR	A	15	-2.776	70.970	47.200	1.00	99.60	A
ATOM	67	N	GLN	A	16	-3.187	69.120	45.997	1.00	86.73	A
ATOM	68	CA	GLN	A	16	-3.299	69.833	44.733	1.00	86.73	A
ATOM	69	CB	GLN	A	16	-2.026	70.664	44.527	1.00	99.43	A
ATOM	70	CG	GLN	A	16	-1.992	71.545	43.289	1.00	99.43	A
ATOM	71	CD	GLN	A	16	-3.015	72.660	43.323	1.00	99.43	A
ATOM	72	OE1	GLN	A	16	-3.247	73.270	44.366	1.00	99.43	A
ATOM	73	NE2	GLN	A	16	-3.620	72.946	42.173	1.00	99.43	A
ATOM	74	C	GLN	A	16	-3.471	68.828	43.580	1.00	86.73	A
ATOM	75	O	GLN	A	16	-4.194	67.831	43.700	1.00	86.73	A
ATOM	76	N	GLY	A	17	-2.807	69.100	42.462	1.00	100.07	A
ATOM	77	CA	GLY	A	17	-2.882	68.214	41.319	1.00	100.07	A
ATOM	78	C	GLY	A	17	-1.503	67.656	41.035	1.00	100.07	A
ATOM	79	O	GLY	A	17	-1.334	66.592	40.433	1.00	100.07	A
ATOM	80	N	ASP	A	18	-0.506	68.399	41.487	1.00	44.89	A
ATOM	81	CA	ASP	A	18	0.888	68.039	41.305	1.00	44.89	A
ATOM	82	CB	ASP	A	18	1.133	67.484	39.902	1.00	100.07	A
ATOM	83	CG	ASP	A	18	0.675	68.439	38.815	1.00	100.07	A
ATOM	84	OD1	ASP	A	18	-0.544	68.692	38.724	1.00	100.07	A
ATOM	85	OD2	ASP	A	18	1.532	68.945	38.054	1.00	100.07	A
ATOM	86	C	ASP	A	18	1.577	69.383	41.457	1.00	44.89	A
ATOM	87	O	ASP	A	18	2.127	69.939	40.507	1.00	44.89	A
ATOM	88	N	HIS	A	19	1.502	69.919	42.667	1.00	68.86	A
ATOM	89	CA	HIS	A	19	2.119	71.197	42.969	1.00	68.86	A
ATOM	90	CB	HIS	A	19	1.223	72.365	42.553	1.00	74.00	A
ATOM	91	CG	HIS	A	19	0.752	72.307	41.141	1.00	74.00	A
ATOM	92	CD2	HIS	A	19	-0.494	72.351	40.616	1.00	74.00	A
ATOM	93	ND1	HIS	A	19	1.617	72.232	40.074	1.00	74.00	A
ATOM	94	CE1	HIS	A	19	0.924	72.234	38.950	1.00	74.00	A
ATOM	95	NE2	HIS	A	19	-0.360	72.307	39.252	1.00	74.00	A
ATOM	96	C	HIS	A	19	2.316	71.310	44.460	1.00	68.86	A
ATOM	97	O	HIS	A	19	2.633	70.332	45.121	1.00	68.86	A
ATOM	98	N	TYR	A	20	2.085	72.516	44.976	1.00	99.95	A
ATOM	99	CA	TYR	A	20	2.253	72.802	46.387	1.00	99.95	A
ATOM	100	CB	TYR	A	20	1.078	73.590	46.935	1.00	74.92	A
ATOM	101	CG	TYR	A	20	1.149	75.062	46.652	1.00	74.92	A
ATOM	102	CD1	TYR	A	20	0.943	75.554	45.359	1.00	74.92	A
ATOM	103	CE1	TYR	A	20	0.938	76.932	45.100	1.00	74.92	A
ATOM	104	CD2	TYR	A	20	1.366	75.980	47.686	1.00	74.92	A
ATOM	105	CE2	TYR	A	20	1.366	77.357	47.442	1.00	74.92	A
ATOM	106	CZ	TYR	A	20	1.147	77.826	46.148	1.00	74.92	A
ATOM	107	OH	TYR	A	20	1.103	79.180	45.901	1.00	74.92	A
ATOM	108	C	TYR	A	20	2.419	71.555	47.216	1.00	99.95	A
ATOM	109	O	TYR	A	20	3.529	71.051	47.384	1.00	99.95	A
ATOM	110	N	GLY	A	21	1.315	71.037	47.726	1.00	45.46	A
ATOM	111	CA	GLY	A	21	1.427	69.850	48.542	1.00	45.46	A
ATOM	112	C	GLY	A	21	1.726	70.270	49.963	1.00	45.46	A
ATOM	113	O	GLY	A	21	2.474	69.612	50.678	1.00	45.46	A
ATOM	114	N	GLU	A	22	1.159	71.398	50.368	1.00	35.21	A
ATOM	115	CA	GLU	A	22	1.366	71.868	51.722	1.00	35.21	A
ATOM	116	CB	GLU	A	22	0.490	73.088	51.988	1.00	81.30	A
ATOM	117	CG	GLU	A	22	0.755	74.249	51.052	1.00	81.30	A
ATOM	118	CD	GLU	A	22	-0.177	75.412	51.313	1.00	81.30	A
ATOM	119	OE1	GLU	A	22	-0.505	75.638	52.497	1.00	81.30	A
ATOM	120	OE2	GLU	A	22	-0.572	76.106	50.348	1.00	81.30	A
ATOM	121	C	GLU	A	22	0.996	70.726	52.675	1.00	35.21	A
ATOM	122	O	GLU	A	22	-0.143	70.283	52.696	1.00	35.21	A
ATOM	123	N	PHE	A	23	1.941	70.213	53.443	1.00	32.98	A
ATOM	124	CA	PHE	A	23	1.585	69.147	54.359	1.00	32.98	A
ATOM	125	CB	PHE	A	23	2.382	67.904	54.023	1.00	49.28	A
ATOM	126	CG	PHE	A	23	2.300	67.536	52.591	1.00	49.28	A
ATOM	127	CD1	PHE	A	23	1.085	67.579	51.927	1.00	49.28	A
ATOM	128	CD2	PHE	A	23	3.426	67.159	51.887	1.00	49.28	A
ATOM	129	CE1	PHE	A	23	0.989	67.251	50.559	1.00	49.28	A
ATOM	130	CE2	PHE	A	23	3.347	66.826	50.517	1.00	49.28	A

ATOM	131	CZ	PHE	A	23	2.125	66.873	49.855	1.00	49.28	A
ATOM	132	C	PHE	A	23	1.849	69.610	55.775	1.00	32.98	A
ATOM	133	O	PHE	A	23	2.958	70.018	56.105	1.00	32.98	A
ATOM	134	N	VAL	A	24	0.828	69.552	56.621	1.00	100.03	A
ATOM	135	CA	VAL	A	24	0.982	70.049	57.979	1.00	100.03	A
ATOM	136	CB	VAL	A	24	0.010	71.190	58.264	1.00	18.08	A
ATOM	137	CG1	VAL	A	24	0.513	71.953	59.436	1.00	18.08	A
ATOM	138	CG2	VAL	A	24	-0.153	72.093	57.043	1.00	18.08	A
ATOM	139	C	VAL	A	24	0.837	69.105	59.154	1.00	100.03	A
ATOM	140	O	VAL	A	24	-0.154	68.389	59.289	1.00	100.03	A
ATOM	141	N	LEU	A	25	1.835	69.141	60.024	1.00	70.43	A
ATOM	142	CA	LEU	A	25	1.806	68.359	61.240	1.00	70.43	A
ATOM	143	CB	LEU	A	25	3.193	68.286	61.851	1.00	75.51	A
ATOM	144	CG	LEU	A	25	3.742	66.876	61.936	1.00	75.51	A
ATOM	145	CD1	LEU	A	25	5.146	66.912	62.490	1.00	75.51	A
ATOM	146	CD2	LEU	A	25	2.845	66.056	62.820	1.00	75.51	A
ATOM	147	C	LEU	A	25	0.932	69.269	62.076	1.00	70.43	A
ATOM	148	O	LEU	A	25	-0.045	69.820	61.566	1.00	70.43	A
ATOM	149	N	GLU	A	26	1.281	69.459	63.343	1.00	100.07	A
ATOM	150	CA	GLU	A	26	0.486	70.341	64.188	1.00	100.07	A
ATOM	151	CB	GLU	A	26	-0.931	69.788	64.324	1.00	33.20	A
ATOM	152	CG	GLU	A	26	-1.963	70.760	63.848	1.00	33.20	A
ATOM	153	CD	GLU	A	26	-1.722	72.117	64.439	1.00	33.20	A
ATOM	154	OE1	GLU	A	26	-1.411	72.153	65.653	1.00	33.20	A
ATOM	155	OE2	GLU	A	26	-1.840	73.128	63.701	1.00	33.20	A
ATOM	156	C	GLU	A	26	1.131	70.604	65.551	1.00	100.07	A
ATOM	157	O	GLU	A	26	2.210	71.194	65.606	1.00	100.07	A
ATOM	158	N	PRO	A	27	0.503	70.181	66.666	1.00	46.06	A
ATOM	159	CD	PRO	A	27	-0.442	69.092	66.971	1.00	30.49	A
ATOM	160	CA	PRO	A	27	1.258	70.517	67.871	1.00	46.06	A
ATOM	161	CB	PRO	A	27	0.380	69.974	68.972	1.00	30.49	A
ATOM	162	CG	PRO	A	27	-0.016	68.670	68.386	1.00	30.49	A
ATOM	163	C	PRO	A	27	2.581	69.773	67.809	1.00	46.06	A
ATOM	164	O	PRO	A	27	2.652	68.650	67.307	1.00	46.06	A
ATOM	165	N	LEU	A	28	3.624	70.401	68.326	1.00	100.07	A
ATOM	166	CA	LEU	A	28	4.946	69.802	68.322	1.00	100.07	A
ATOM	167	CB	LEU	A	28	5.558	69.950	66.921	1.00	56.66	A
ATOM	168	CG	LEU	A	28	4.960	69.040	65.843	1.00	56.66	A
ATOM	169	CD1	LEU	A	28	5.190	69.595	64.443	1.00	56.66	A
ATOM	170	CD2	LEU	A	28	5.575	67.660	66.011	1.00	56.66	A
ATOM	171	C	LEU	A	28	5.761	70.556	69.364	1.00	100.07	A
ATOM	172	O	LEU	A	28	6.266	71.650	69.100	1.00	100.07	A
ATOM	173	N	GLU	A	29	5.866	69.966	70.552	1.00	99.76	A
ATOM	174	CA	GLU	A	29	6.590	70.576	71.655	1.00	99.76	A
ATOM	175	CB	GLU	A	29	6.947	69.505	72.693	1.00	100.07	A
ATOM	176	CG	GLU	A	29	5.680	68.888	73.315	1.00	100.07	A
ATOM	177	CD	GLU	A	29	5.952	67.897	74.434	1.00	100.07	A
ATOM	178	OE1	GLU	A	29	6.663	66.897	74.190	1.00	100.07	A
ATOM	179	OE2	GLU	A	29	5.441	68.118	75.556	1.00	100.07	A
ATOM	180	C	GLU	A	29	7.805	71.360	71.175	1.00	99.76	A
ATOM	181	O	GLU	A	29	8.707	70.830	70.528	1.00	99.76	A
ATOM	182	N	ARG	A	30	7.768	72.653	71.470	1.00	78.24	A
ATOM	183	CA	ARG	A	30	8.799	73.609	71.102	1.00	78.24	A
ATOM	184	CB	ARG	A	30	8.934	74.646	72.225	1.00	100.07	A
ATOM	185	CG	ARG	A	30	9.973	75.730	71.982	1.00	100.07	A
ATOM	186	CD	ARG	A	30	9.413	77.113	72.296	1.00	100.07	A
ATOM	187	NE	ARG	A	30	10.388	78.166	72.021	1.00	100.07	A
ATOM	188	CZ	ARG	A	30	10.064	79.418	71.722	1.00	100.07	A
ATOM	189	NH1	ARG	A	30	8.786	79.770	71.658	1.00	100.07	A
ATOM	190	NH2	ARG	A	30	11.016	80.311	71.481	1.00	100.07	A
ATOM	191	C	ARG	A	30	10.167	73.030	70.773	1.00	78.24	A
ATOM	192	O	ARG	A	30	10.859	72.509	71.651	1.00	78.24	A
ATOM	193	N	GLY	A	31	10.549	73.125	69.502	1.00	82.60	A
ATOM	194	CA	GLY	A	31	11.854	72.646	69.095	1.00	82.60	A
ATOM	195	C	GLY	A	31	11.892	71.458	68.174	1.00	82.60	A
ATOM	196	O	GLY	A	31	12.842	70.682	68.217	1.00	82.60	A
ATOM	197	N	PHE	A	32	10.870	71.301	67.346	1.00	70.02	A
ATOM	198	CA	PHE	A	32	10.843	70.184	66.413	1.00	70.02	A
ATOM	199	CB	PHE	A	32	9.910	69.080	66.905	1.00	38.84	A
ATOM	200	CG	PHE	A	32	10.558	68.106	67.843	1.00	38.84	A
ATOM	201	CD1	PHE	A	32	10.952	68.494	69.116	1.00	38.84	A
ATOM	202	CD2	PHE	A	32	10.728	66.788	67.474	1.00	38.84	A
ATOM	203	CE1	PHE	A	32	11.500	67.571	70.013	1.00	38.84	A
ATOM	204	CE2	PHE	A	32	11.274	65.862	68.364	1.00	38.84	A
ATOM	205	CZ	PHE	A	32	11.657	66.255	69.634	1.00	38.84	A
ATOM	206	C	PHE	A	32	10.403	70.661	65.041	1.00	70.02	A
ATOM	207	O	PHE	A	32	10.872	70.158	64.020	1.00	70.02	A
ATOM	208	N	GLY	A	33	9.507	71.642	65.019	1.00	52.43	A
ATOM	209	CA	GLY	A	33	9.022	72.160	63.754	1.00	52.43	A
ATOM	210	C	GLY	A	33	10.150	72.311	62.758	1.00	52.43	A
ATOM	211	O	GLY	A	33	9.926	72.368	61.550	1.00	52.43	A
ATOM	212	N	VAL	A	34	11.371	72.386	63.279	1.00	71.93	A
ATOM	213	CA	VAL	A	34	12.560	72.495	62.451	1.00	71.93	A
ATOM	214	CB	VAL	A	34	13.449	73.635	62.897	1.00	70.76	A

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ATOM	215	CG1	VAL	A	34	12.679	74.928	62.857	1.00	70.76	A
ATOM	216	CG2	VAL	A	34	13.962	73.349	64.280	1.00	70.76	A
ATOM	217	C	VAL	A	34	13.356	71.201	62.560	1.00	71.93	A
ATOM	218	O	VAL	A	34	13.984	70.771	61.596	1.00	71.93	A
ATOM	219	N	THR	A	35	13.328	70.584	63.737	1.00	58.19	A
ATOM	220	CA	THR	A	35	14.040	69.329	63.952	1.00	58.19	A
ATOM	221	CB	THR	A	35	13.727	68.750	65.344	1.00	96.03	A
ATOM	222	OG1	THR	A	35	14.468	69.479	66.330	1.00	96.03	A
ATOM	223	CG2	THR	A	35	14.097	67.278	65.416	1.00	96.03	A
ATOM	224	C	THR	A	35	13.690	68.295	62.881	1.00	58.19	A
ATOM	225	O	THR	A	35	14.418	67.317	62.682	1.00	58.19	A
ATOM	226	N	LEU	A	36	12.580	68.509	62.183	1.00	45.88	A
ATOM	227	CA	LEU	A	36	12.201	67.580	61.134	1.00	45.88	A
ATOM	228	CB	LEU	A	36	11.105	66.616	61.617	1.00	72.17	A
ATOM	229	CG	LEU	A	36	9.905	67.087	62.438	1.00	72.17	A
ATOM	230	CD1	LEU	A	36	8.883	65.962	62.562	1.00	72.17	A
ATOM	231	CD2	LEU	A	36	10.379	67.502	63.809	1.00	72.17	A
ATOM	232	C	LEU	A	36	11.793	68.227	59.820	1.00	45.88	A
ATOM	233	O	LEU	A	36	12.138	67.725	58.752	1.00	45.88	A
ATOM	234	N	GLY	A	37	11.077	69.342	59.888	1.00	100.07	A
ATOM	235	CA	GLY	A	37	10.649	69.998	58.666	1.00	100.07	A
ATOM	236	C	GLY	A	37	11.797	70.359	57.744	1.00	100.07	A
ATOM	237	O	GLY	A	37	11.598	70.576	56.549	1.00	100.07	A
ATOM	238	N	ASN	A	38	13.006	70.411	58.289	1.00	62.51	A
ATOM	239	CA	ASN	A	38	14.175	70.767	57.495	1.00	62.51	A
ATOM	240	CB	ASN	A	38	15.222	71.433	58.389	1.00	44.82	A
ATOM	241	CG	ASN	A	38	16.323	72.078	57.600	1.00	44.82	A
ATOM	242	OD1	ASN	A	38	17.140	71.392	57.002	1.00	44.82	A
ATOM	243	ND2	ASN	A	38	16.345	73.410	57.582	1.00	44.82	A
ATOM	244	C	ASN	A	38	14.810	69.612	56.715	1.00	62.51	A
ATOM	245	O	ASN	A	38	14.766	69.608	55.485	1.00	62.51	A
ATOM	246	N	PRO	A	39	15.403	68.618	57.413	1.00	32.75	A
ATOM	247	CD	PRO	A	39	15.306	68.316	58.852	1.00	32.40	A
ATOM	248	CA	PRO	A	39	16.025	67.496	56.706	1.00	32.75	A
ATOM	249	CB	PRO	A	39	16.090	66.408	57.768	1.00	32.40	A
ATOM	250	CG	PRO	A	39	16.281	67.167	59.007	1.00	32.40	A
ATOM	251	C	PRO	A	39	15.153	67.093	55.542	1.00	32.75	A
ATOM	252	O	PRO	A	39	15.644	66.776	54.456	1.00	32.75	A
ATOM	253	N	LEU	A	40	13.845	67.112	55.776	1.00	61.43	A
ATOM	254	CA	LEU	A	40	12.903	66.745	54.733	1.00	61.43	A
ATOM	255	CB	LEU	A	40	11.464	67.042	55.183	1.00	62.67	A
ATOM	256	CG	LEU	A	40	11.008	66.513	56.555	1.00	62.67	A
ATOM	257	CD1	LEU	A	40	9.508	66.718	56.683	1.00	62.67	A
ATOM	258	CD2	LEU	A	40	11.345	65.039	56.723	1.00	62.67	A
ATOM	259	C	LEU	A	40	13.283	67.576	53.514	1.00	61.43	A
ATOM	260	O	LEU	A	40	13.648	67.027	52.472	1.00	61.43	A
ATOM	261	N	ALA	A	41	13.235	68.899	53.674	1.00	76.41	A
ATOM	262	CA	ALA	A	41	13.570	69.831	52.598	1.00	76.41	A
ATOM	263	CB	ALA	A	41	13.664	71.271	53.135	1.00	17.66	A
ATOM	264	C	ALA	A	41	14.888	69.424	51.965	1.00	76.41	A
ATOM	265	O	ALA	A	41	14.999	69.288	50.743	1.00	76.41	A
ATOM	266	N	ARG	A	42	15.891	69.241	52.811	1.00	55.18	A
ATOM	267	CA	ARG	A	42	17.195	68.835	52.331	1.00	55.18	A
ATOM	268	CB	ARG	A	42	18.081	68.423	53.505	1.00	50.68	A
ATOM	269	CG	ARG	A	42	18.327	69.551	54.476	1.00	50.68	A
ATOM	270	CD	ARG	A	42	19.592	70.268	54.136	1.00	50.68	A
ATOM	271	NE	ARG	A	42	20.706	69.661	54.843	1.00	50.68	A
ATOM	272	CZ	ARG	A	42	21.938	69.590	54.361	1.00	50.68	A
ATOM	273	NH1	ARG	A	42	22.213	70.085	53.156	1.00	50.68	A
ATOM	274	NH2	ARG	A	42	22.895	69.034	55.095	1.00	50.68	A
ATOM	275	C	ARG	A	42	16.918	67.642	51.432	1.00	55.18	A
ATOM	276	O	ARG	A	42	16.989	67.750	50.209	1.00	55.18	A
ATOM	277	N	ILE	A	43	16.561	66.520	52.051	1.00	20.10	A
ATOM	278	CA	ILE	A	43	16.269	65.302	51.317	1.00	20.10	A
ATOM	279	CB	ILE	A	43	15.440	64.319	52.162	1.00	22.38	A
ATOM	280	CG2	ILE	A	43	15.404	62.952	51.482	1.00	22.38	A
ATOM	281	CG1	ILE	A	43	16.062	64.166	53.541	1.00	22.38	A
ATOM	282	CD	ILE	A	43	17.339	63.403	53.534	1.00	22.38	A
ATOM	283	C	ILE	A	43	15.468	65.641	50.066	1.00	20.10	A
ATOM	284	O	ILE	A	43	15.890	65.356	48.943	1.00	20.10	A
ATOM	285	N	LEU	A	44	14.310	66.260	50.281	1.00	46.55	A
ATOM	286	CA	LEU	A	44	13.419	66.648	49.196	1.00	46.55	A
ATOM	287	CB	LEU	A	44	12.410	67.689	49.686	1.00	52.98	A
ATOM	288	CG	LEU	A	44	11.436	67.147	50.731	1.00	52.98	A
ATOM	289	CD1	LEU	A	44	10.608	68.269	51.320	1.00	52.98	A
ATOM	290	CD2	LEU	A	44	10.550	66.110	50.077	1.00	52.98	A
ATOM	291	C	LEU	A	44	14.189	67.204	48.002	1.00	46.55	A
ATOM	292	O	LEU	A	44	14.084	66.692	46.881	1.00	46.55	A
ATOM	293	N	LEU	A	45	14.970	68.250	48.247	1.00	40.73	A
ATOM	294	CA	LEU	A	45	15.757	68.877	47.192	1.00	40.73	A
ATOM	295	CB	LEU	A	45	16.322	70.203	47.690	1.00	25.17	A
ATOM	296	CG	LEU	A	45	15.338	71.271	48.150	1.00	25.17	A
ATOM	297	CD1	LEU	A	45	16.096	72.346	48.868	1.00	25.17	A
ATOM	298	CD2	LEU	A	45	14.609	71.867	46.976	1.00	25.17	A

ATOM	299	C	LEU	A	45	16.914	67.985	46.744	1.00	40.73	A
ATOM	300	O	LEU	A	45	17.466	68.168	45.660	1.00	40.73	A
ATOM	301	N	SER	A	46	17.270	67.023	47.592	1.00	49.02	A
ATOM	302	CA	SER	A	46	18.375	66.112	47.326	1.00	49.02	A
ATOM	303	CB	SER	A	46	19.145	65.831	48.619	1.00	100.07	A
ATOM	304	OG	SER	A	46	19.335	67.007	49.381	1.00	100.07	A
ATOM	305	C	SER	A	46	17.915	64.782	46.753	1.00	49.02	A
ATOM	306	O	SER	A	46	17.264	64.709	45.714	1.00	49.02	A
ATOM	307	N	SER	A	47	18.276	63.726	47.461	1.00	43.33	A
ATOM	308	CA	SER	A	47	17.935	62.367	47.083	1.00	43.33	A
ATOM	309	CB	SER	A	47	18.397	61.419	48.196	1.00	99.93	A
ATOM	310	OG	SER	A	47	19.629	61.851	48.751	1.00	99.93	A
ATOM	311	C	SER	A	47	16.435	62.137	46.802	1.00	43.33	A
ATOM	312	O	SER	A	47	15.624	62.121	47.733	1.00	43.33	A
ATOM	313	N	ILE	A	48	16.073	61.959	45.531	1.00	85.43	A
ATOM	314	CA	ILE	A	48	14.684	61.695	45.128	1.00	85.43	A
ATOM	315	CB	ILE	A	48	13.746	62.916	45.278	1.00	25.46	A
ATOM	316	CG2	ILE	A	48	12.484	62.694	44.442	1.00	25.46	A
ATOM	317	CG1	ILE	A	48	13.377	63.159	46.745	1.00	25.46	A
ATOM	318	CD	ILE	A	48	12.100	62.507	47.206	1.00	25.46	A
ATOM	319	C	ILE	A	48	14.616	61.324	43.660	1.00	85.43	A
ATOM	320	O	ILE	A	48	14.911	62.151	42.796	1.00	85.43	A
ATOM	321	N	PRO	A	49	14.191	60.089	43.354	1.00	54.50	A
ATOM	322	CD	PRO	A	49	13.855	59.002	44.287	1.00	98.88	A
ATOM	323	CA	PRO	A	49	14.090	59.628	41.968	1.00	54.50	A
ATOM	324	CB	PRO	A	49	13.472	58.243	42.115	1.00	98.88	A
ATOM	325	CG	PRO	A	49	14.029	57.779	43.417	1.00	98.88	A
ATOM	326	C	PRO	A	49	13.235	60.555	41.113	1.00	54.50	A
ATOM	327	O	PRO	A	49	12.143	60.947	41.518	1.00	54.50	A
ATOM	328	N	GLY	A	50	13.749	60.903	39.937	1.00	44.57	A
ATOM	329	CA	GLY	A	50	13.041	61.776	39.021	1.00	44.57	A
ATOM	330	C	GLY	A	50	13.338	61.313	37.613	1.00	44.57	A
ATOM	331	O	GLY	A	50	13.775	60.182	37.424	1.00	44.57	A
ATOM	332	N	THR	A	51	13.134	62.178	36.624	1.00	54.82	A
ATOM	333	CA	THR	A	51	13.368	61.808	35.229	1.00	54.82	A
ATOM	334	CB	THR	A	51	12.086	61.266	34.624	1.00	88.12	A
ATOM	335	OG1	THR	A	51	11.121	62.326	34.566	1.00	88.12	A
ATOM	336	CG2	THR	A	51	11.528	60.129	35.480	1.00	88.12	A
ATOM	337	C	THR	A	51	13.793	63.019	34.397	1.00	54.82	A
ATOM	338	O	THR	A	51	13.311	64.123	34.624	1.00	54.82	A
ATOM	339	N	ALA	A	52	14.680	62.812	33.425	1.00	32.19	A
ATOM	340	CA	ALA	A	52	15.134	63.907	32.571	1.00	32.19	A
ATOM	341	CB	ALA	A	52	16.008	64.856	33.371	1.00	100.07	A
ATOM	342	C	ALA	A	52	15.876	63.456	31.313	1.00	32.19	A
ATOM	343	O	ALA	A	52	16.463	62.375	31.280	1.00	32.19	A
ATOM	344	N	VAL	A	53	15.847	64.298	30.282	1.00	31.84	A
ATOM	345	CA	VAL	A	53	16.510	64.001	29.016	1.00	31.84	A
ATOM	346	CB	VAL	A	53	16.542	65.251	28.123	1.00	36.17	A
ATOM	347	CG1	VAL	A	53	17.906	65.430	27.504	1.00	36.17	A
ATOM	348	CG2	VAL	A	53	15.501	65.126	27.036	1.00	36.17	A
ATOM	349	C	VAL	A	53	17.930	63.524	29.281	1.00	31.84	A
ATOM	350	O	VAL	A	53	18.460	63.735	30.365	1.00	31.84	A
ATOM	351	N	THR	A	54	18.562	62.900	28.294	1.00	38.47	A
ATOM	352	CA	THR	A	54	19.915	62.400	28.495	1.00	38.47	A
ATOM	353	CB	THR	A	54	19.866	60.958	28.965	1.00	69.18	A
ATOM	354	OG1	THR	A	54	18.933	60.849	30.043	1.00	69.18	A
ATOM	355	CG2	THR	A	54	21.238	60.497	29.413	1.00	69.18	A
ATOM	356	C	THR	A	54	20.810	62.434	27.264	1.00	38.47	A
ATOM	357	O	THR	A	54	22.038	62.464	27.391	1.00	38.47	A
ATOM	358	N	SER	A	55	20.192	62.403	26.082	1.00	48.54	A
ATOM	359	CA	SER	A	55	20.919	62.424	24.810	1.00	48.54	A
ATOM	360	CB	SER	A	55	21.768	61.157	24.684	1.00	72.28	A
ATOM	361	OG	SER	A	55	22.265	61.011	23.369	1.00	72.28	A
ATOM	362	C	SER	A	55	19.970	62.520	23.611	1.00	48.54	A
ATOM	363	O	SER	A	55	18.924	61.864	23.582	1.00	48.54	A
ATOM	364	N	VAL	A	56	20.331	63.334	22.622	1.00	74.20	A
ATOM	365	CA	VAL	A	56	19.483	63.476	21.440	1.00	74.20	A
ATOM	366	CB	VAL	A	56	18.765	64.875	21.357	1.00	15.45	A
ATOM	367	CG1	VAL	A	56	18.329	65.339	22.717	1.00	15.45	A
ATOM	368	CG2	VAL	A	56	19.664	65.896	20.712	1.00	15.45	A
ATOM	369	C	VAL	A	56	20.216	63.290	20.120	1.00	74.20	A
ATOM	370	O	VAL	A	56	21.439	63.384	20.048	1.00	74.20	A
ATOM	371	N	TYR	A	57	19.439	63.014	19.079	1.00	62.63	A
ATOM	372	CA	TYR	A	57	19.954	62.864	17.731	1.00	62.63	A
ATOM	373	CB	TYR	A	57	19.964	61.401	17.266	1.00	52.17	A
ATOM	374	CG	TYR	A	57	20.310	61.202	15.788	1.00	52.17	A
ATOM	375	CD1	TYR	A	57	20.875	60.010	15.335	1.00	52.17	A
ATOM	376	CE1	TYR	A	57	21.190	59.822	13.980	1.00	52.17	A
ATOM	377	CD2	TYR	A	57	20.065	62.199	14.844	1.00	52.17	A
ATOM	378	CE2	TYR	A	57	20.371	62.022	13.492	1.00	52.17	A
ATOM	379	CZ	TYR	A	57	20.935	60.837	13.066	1.00	52.17	A
ATOM	380	OH	TYR	A	57	21.253	60.688	11.732	1.00	52.17	A
ATOM	381	C	TYR	A	57	18.991	63.644	16.881	1.00	62.63	A
ATOM	382	O	TYR	A	57	17.850	63.227	16.690	1.00	62.63	A

ATOM	383	N	ILE	A	58	19.444	64.793	16.399	1.00	40.99	A
ATOM	384	CA	ILE	A	58	18.623	65.611	15.519	1.00	40.99	A
ATOM	385	CB	ILE	A	58	18.849	67.138	15.730	1.00	48.67	A
ATOM	386	CG2	ILE	A	58	17.754	67.919	15.058	1.00	48.67	A
ATOM	387	CG1	ILE	A	58	18.808	67.490	17.209	1.00	48.67	A
ATOM	388	CD	ILE	A	58	20.002	66.996	17.960	1.00	48.67	A
ATOM	389	C	ILE	A	58	19.166	65.206	14.148	1.00	40.99	A
ATOM	390	O	ILE	A	58	20.378	65.247	13.930	1.00	40.99	A
ATOM	391	N	GLU	A	59	18.286	64.789	13.241	1.00	100.07	A
ATOM	392	CA	GLU	A	59	18.698	64.361	11.903	1.00	100.07	A
ATOM	393	CB	GLU	A	59	17.461	64.209	11.008	1.00	100.07	A
ATOM	394	CG	GLU	A	59	17.757	63.710	9.605	1.00	100.07	A
ATOM	395	CD	GLU	A	59	17.088	62.377	9.299	1.00	100.07	A
ATOM	396	OE1	GLU	A	59	17.258	61.420	10.086	1.00	100.07	A
ATOM	397	OE2	GLU	A	59	16.396	62.285	8.264	1.00	100.07	A
ATOM	398	C	GLU	A	59	19.683	65.326	11.243	1.00	100.07	A
ATOM	399	O	GLU	A	59	19.293	66.422	10.835	1.00	100.07	A
ATOM	400	N	ASP	A	60	20.947	64.901	11.150	1.00	100.07	A
ATOM	401	CA	ASP	A	60	22.050	65.669	10.544	1.00	100.07	A
ATOM	402	CB	ASP	A	60	21.514	66.695	9.536	1.00	81.65	A
ATOM	403	CG	ASP	A	60	20.699	66.058	8.429	1.00	81.65	A
ATOM	404	OD1	ASP	A	60	21.295	65.438	7.526	1.00	81.65	A
ATOM	405	OD2	ASP	A	60	19.457	66.170	8.465	1.00	81.65	A
ATOM	406	C	ASP	A	60	22.969	66.394	11.539	1.00	100.07	A
ATOM	407	O	ASP	A	60	22.543	66.839	12.606	1.00	100.07	A
ATOM	408	N	VAL	A	61	24.239	66.507	11.157	1.00	87.49	A
ATOM	409	CA	VAL	A	61	25.279	67.175	11.944	1.00	87.49	A
ATOM	410	CB	VAL	A	61	25.121	68.709	11.901	1.00	76.95	A
ATOM	411	CG1	VAL	A	61	26.437	69.359	12.288	1.00	76.95	A
ATOM	412	CG2	VAL	A	61	24.679	69.160	10.516	1.00	76.95	A
ATOM	413	C	VAL	A	61	25.392	66.763	13.401	1.00	87.49	A
ATOM	414	O	VAL	A	61	24.406	66.751	14.140	1.00	87.49	A
ATOM	415	N	LEU	A	62	26.611	66.427	13.808	1.00	69.94	A
ATOM	416	CA	LEU	A	62	26.859	66.051	15.191	1.00	69.94	A
ATOM	417	CB	LEU	A	62	27.936	64.971	15.280	1.00	99.97	A
ATOM	418	CG	LEU	A	62	29.229	65.175	14.498	1.00	99.97	A
ATOM	419	CD1	LEU	A	62	30.181	64.026	14.818	1.00	99.97	A
ATOM	420	CD2	LEU	A	62	28.936	65.237	13.002	1.00	99.97	A
ATOM	421	C	LEU	A	62	27.275	67.293	15.966	1.00	69.94	A
ATOM	422	O	LEU	A	62	26.962	68.411	15.553	1.00	69.94	A
ATOM	423	N	HIS	A	63	27.987	67.094	17.071	1.00	43.02	A
ATOM	424										

REF ID: A66260

ATOM	467	CA	ILE	A	68	19.825	73.136	11.444	1.00	68.89	A
ATOM	468	CB	ILE	A	68	18.866	72.182	12.216	1.00	47.46	A
ATOM	469	CG2	ILE	A	68	18.420	71.048	11.306	1.00	47.46	A
ATOM	470	CG1	ILE	A	68	19.574	71.570	13.424	1.00	47.46	A
ATOM	471	CD	ILE	A	68	18.671	70.752	14.283	1.00	47.46	A
ATOM	472	C	ILE	A	68	18.962	74.172	10.719	1.00	68.89	A
ATOM	473	O	ILE	A	68	18.215	74.927	11.348	1.00	68.89	A
ATOM	474	N	PRO	A	69	19.035	74.189	9.375	1.00	69.72	A
ATOM	475	CD	PRO	A	69	19.754	73.147	8.619	1.00	34.85	A
ATOM	476	CA	PRO	A	69	18.316	75.088	8.454	1.00	69.72	A
ATOM	477	CB	PRO	A	69	18.767	74.604	7.077	1.00	34.85	A
ATOM	478	CG	PRO	A	69	18.999	73.140	7.306	1.00	34.85	A
ATOM	479	C	PRO	A	69	16.800	75.116	8.569	1.00	69.72	A
ATOM	480	O	PRO	A	69	16.187	74.160	9.033	1.00	69.72	A
ATOM	481	N	GLY	A	70	16.212	76.222	8.116	1.00	92.95	A
ATOM	482	CA	GLY	A	70	14.772	76.388	8.174	1.00	92.95	A
ATOM	483	C	GLY	A	70	14.338	76.526	9.618	1.00	92.95	A
ATOM	484	O	GLY	A	70	13.167	76.771	9.905	1.00	92.95	A
ATOM	485	N	VAL	A	71	15.296	76.377	10.528	1.00	56.58	A
ATOM	486	CA	VAL	A	71	15.033	76.454	11.955	1.00	56.58	A
ATOM	487	CB	VAL	A	71	15.624	75.233	12.690	1.00	36.59	A
ATOM	488	CG1	VAL	A	71	15.017	75.097	14.074	1.00	36.59	A
ATOM	489	CG2	VAL	A	71	15.422	73.988	11.876	1.00	36.59	A
ATOM	490	C	VAL	A	71	15.712	77.683	12.536	1.00	56.58	A
ATOM	491	O	VAL	A	71	16.927	77.701	12.689	1.00	56.58	A
ATOM	492	N	LYS	A	72	14.928	78.700	12.869	1.00	65.96	A
ATOM	493	CA	LYS	A	72	15.459	79.925	13.473	1.00	65.96	A
ATOM	494	CB	LYS	A	72	14.290	80.823	13.902	1.00	99.92	A
ATOM	495	CG	LYS	A	72	14.647	81.927	14.895	1.00	99.92	A
ATOM	496	CD	LYS	A	72	13.387	82.534	15.506	1.00	99.92	A
ATOM	497	CE	LYS	A	72	13.686	83.308	16.781	1.00	99.92	A
ATOM	498	NZ	LYS	A	72	12.437	83.682	17.502	1.00	99.92	A
ATOM	499	C	LYS	A	72	16.346	79.620	14.688	1.00	65.96	A
ATOM	500	O	LYS	A	72	17.428	80.197	14.840	1.00	65.96	A
ATOM	501	N	GLU	A	73	15.868	78.730	15.555	1.00	56.97	A
ATOM	502	CA	GLU	A	73	16.607	78.315	16.744	1.00	56.97	A
ATOM	503	CB	GLU	A	73	15.973	77.066	17.361	1.00	64.77	A
ATOM	504	CG	GLU	A	73	15.259	77.297	18.646	1.00	64.77	A
ATOM	505	CD	GLU	A	73	14.292	78.429	18.525	1.00	64.77	A
ATOM	506	OE1	GLU	A	73	13.611	78.489	17.484	1.00	64.77	A
ATOM	507	OE2	GLU	A	73	14.205	79.254	19.460	1.00	64.77	A
ATOM	508	C	GLU	A	73	18.028	77.951	16.344	1.00	56.97	A
ATOM	509	O	GLU	A	73	18.369	77.943	15.163	1.00	56.97	A
ATOM	510	N	ASP	A	74	18.840	77.627	17.344	1.00	56.37	A
ATOM	511	CA	ASP	A	74	20.227	77.213	17.143	1.00	56.37	A
ATOM	512	CB	ASP	A	74	21.111	77.836	18.232	1.00	68.46	A
ATOM	513	CG	ASP	A	74	22.589	77.652	17.969	1.00	68.46	A
ATOM	514	OD1	ASP	A	74	23.082	76.509	18.057	1.00	68.46	A
ATOM	515	OD2	ASP	A	74	23.260	78.663	17.675	1.00	68.46	A
ATOM	516	C	ASP	A	74	20.176	75.695	17.301	1.00	56.37	A
ATOM	517	O	ASP	A	74	19.332	75.039	16.700	1.00	56.37	A
ATOM	518	N	VAL	A	75	21.064	75.132	18.107	1.00	47.58	A
ATOM	519	CA	VAL	A	75	21.052	73.694	18.331	1.00	47.58	A
ATOM	520	CB	VAL	A	75	22.004	72.915	17.374	1.00	71.89	A
ATOM	521	CG1	VAL	A	75	21.598	73.139	15.923	1.00	71.89	A
ATOM	522	CG2	VAL	A	75	23.438	73.342	17.593	1.00	71.89	A
ATOM	523	C	VAL	A	75	21.480	73.467	19.761	1.00	47.58	A
ATOM	524	O	VAL	A	75	21.212	72.415	20.341	1.00	47.58	A
ATOM	525	N	VAL	A	76	22.150	74.470	20.325	1.00	47.65	A
ATOM	526	CA	VAL	A	76	22.606	74.387	21.705	1.00	47.65	A
ATOM	527	CB	VAL	A	76	23.711	75.429	22.029	1.00	53.08	A
ATOM	528	CG1	VAL	A	76	24.565	74.932	23.186	1.00	53.08	A
ATOM	529	CG2	VAL	A	76	24.561	75.700	20.806	1.00	53.08	A
ATOM	530	C	VAL	A	76	21.361	74.716	22.502	1.00	47.65	A
ATOM	531	O	VAL	A	76	20.969	73.976	23.415	1.00	47.65	A
ATOM	532	N	GLU	A	77	20.738	75.833	22.118	1.00	51.13	A
ATOM	533	CA	GLU	A	77	19.512	76.305	22.750	1.00	51.13	A
ATOM	534	CB	GLU	A	77	18.912	77.446	21.935	1.00	99.63	A
ATOM	535	CG	GLU	A	77	18.429	78.606	22.766	1.00	99.63	A
ATOM	536	CD	GLU	A	77	17.254	79.306	22.125	1.00	99.63	A
ATOM	537	OE1	GLU	A	77	16.118	78.791	22.241	1.00	99.63	A
ATOM	538	OE2	GLU	A	77	17.469	80.362	21.493	1.00	99.63	A
ATOM	539	C	GLU	A	77	18.566	75.106	22.752	1.00	51.13	A
ATOM	540	O	GLU	A	77	18.148	74.627	23.805	1.00	51.13	A
ATOM	541	N	ILE	A	78	18.239	74.623	21.557	1.00	41.27	A
ATOM	542	CA	ILE	A	78	17.374	73.468	21.425	1.00	41.27	A
ATOM	543	CB	ILE	A	78	17.596	72.782	20.080	1.00	44.04	A
ATOM	544	CG2	ILE	A	78	16.831	71.480	20.035	1.00	44.04	A
ATOM	545	CG1	ILE	A	78	17.197	73.735	18.951	1.00	44.04	A
ATOM	546	CD	ILE	A	78	17.541	73.234	17.560	1.00	44.04	A
ATOM	547	C	ILE	A	78	17.786	72.519	22.530	1.00	41.27	A
ATOM	548	O	ILE	A	78	16.984	72.174	23.385	1.00	41.27	A
ATOM	549	N	ILE	A	79	19.049	72.118	22.538	1.00	42.42	A
ATOM	550	CA	ILE	A	79	19.491	71.211	23.576	1.00	42.42	A

ATOM	551	CB	ILE	A	79	21.013	71.013	23.586	1.00	35.69	A
ATOM	552	CG2	ILE	A	79	21.426	70.226	24.837	1.00	35.69	A
ATOM	553	CG1	ILE	A	79	21.450	70.237	22.349	1.00	35.69	A
ATOM	554	CD	ILE	A	79	21.040	68.792	22.370	1.00	35.69	A
ATOM	555	C	ILE	A	79	19.089	71.752	24.927	1.00	42.42	A
ATOM	556	O	ILE	A	79	18.740	70.980	25.811	1.00	42.42	A
ATOM	557	N	LEU	A	80	19.136	73.074	25.084	1.00	70.11	A
ATOM	558	CA	LEU	A	80	18.779	73.710	26.354	1.00	70.11	A
ATOM	559	CB	LEU	A	80	19.257	75.173	26.380	1.00	34.05	A
ATOM	560	CG	LEU	A	80	20.732	75.506	26.083	1.00	34.05	A
ATOM	561	CD1	LEU	A	80	20.959	76.988	26.339	1.00	34.05	A
ATOM	562	CD2	LEU	A	80	21.677	74.686	26.952	1.00	34.05	A
ATOM	563	C	LEU	A	80	17.276	73.644	26.654	1.00	70.11	A
ATOM	564	O	LEU	A	80	16.892	73.356	27.789	1.00	70.11	A
ATOM	565	N	ASN	A	81	16.423	73.924	25.665	1.00	34.19	A
ATOM	566	CA	ASN	A	81	14.981	73.826	25.903	1.00	34.19	A
ATOM	567	CB	ASN	A	81	14.178	74.115	24.622	1.00	38.34	A
ATOM	568	CG	ASN	A	81	14.037	75.611	24.326	1.00	38.34	A
ATOM	569	OD1	ASN	A	81	14.858	76.211	23.631	1.00	38.34	A
ATOM	570	ND2	ASN	A	81	12.984	76.215	24.859	1.00	38.34	A
ATOM	571	C	ASN	A	81	14.754	72.381	26.350	1.00	34.19	A
ATOM	572	O	ASN	A	81	14.429	72.100	27.508	1.00	34.19	A
ATOM	573	N	LEU	A	82	14.976	71.473	25.407	1.00	59.07	A
ATOM	574	CA	LEU	A	82	14.849	70.030	25.594	1.00	59.07	A
ATOM	575	CB	LEU	A	82	15.567	69.353	24.409	1.00	58.84	A
ATOM	576	CG	LEU	A	82	15.719	67.852	24.181	1.00	58.84	A
ATOM	577	CD1	LEU	A	82	15.984	67.607	22.702	1.00	58.84	A
ATOM	578	CD2	LEU	A	82	16.848	67.312	25.036	1.00	58.84	A
ATOM	579	C	LEU	A	82	15.404	69.563	26.944	1.00	59.07	A
ATOM	580	O	LEU	A	82	15.077	68.478	27.415	1.00	59.07	A
ATOM	581	N	LYS	A	83	16.238	70.389	27.565	1.00	40.47	A
ATOM	582	CA	LYS	A	83	16.819	70.056	28.860	1.00	40.47	A
ATOM	583	CB	LYS	A	83	17.902	71.066	29.260	1.00	71.50	A
ATOM	584	CG	LYS	A	83	19.280	70.837	28.666	1.00	71.50	A
ATOM	585	CD	LYS	A	83	20.261	71.900	29.148	1.00	71.50	A
ATOM	586	CE	LYS	A	83	20.472	71.818	30.645	1.00	71.50	A
ATOM	587	NZ	LYS	A	83	21.299	72.948	31.147	1.00	71.50	A
ATOM	588	C	LYS	A	83	15.739	70.082	29.928	1.00	40.47	A
ATOM	589	O	LYS	A	83	15.774	69.300	30.885	1.00	40.47	A
ATOM	590	N	GLU	A	84	14.791	71.002	29.767	1.00	100.07	A
ATOM	591	CA	GLU	A	84	13.698	71.163	30.719	1.00	100.07	A
ATOM	592										



ATOM	635	CG	PHE	A	89	9.547	57.385	32.429	1.00	36.30	A
ATOM	636	CD1	PHE	A	89	9.441	58.369	31.444	1.00	36.30	A
ATOM	637	CD2	PHE	A	89	10.717	56.620	32.483	1.00	36.30	A
ATOM	638	CE1	PHE	A	89	10.493	58.578	30.514	1.00	36.30	A
ATOM	639	CE2	PHE	A	89	11.769	56.822	31.562	1.00	36.30	A
ATOM	640	CZ	PHE	A	89	11.655	57.800	30.582	1.00	36.30	A
ATOM	641	C	PHE	A	89	5.986	56.568	33.069	1.00	88.02	A
ATOM	642	O	PHE	A	89	5.719	55.858	32.099	1.00	88.02	A
ATOM	643	N	LEU	A	90	5.375	56.428	34.240	1.00	100.03	A
ATOM	644	CA	LEU	A	90	4.355	55.398	34.452	1.00	100.03	A
ATOM	645	CB	LEU	A	90	3.385	55.335	33.268	1.00	43.38	A
ATOM	646	CG	LEU	A	90	2.587	56.623	33.037	1.00	43.38	A
ATOM	647	CD1	LEU	A	90	1.514	56.436	31.972	1.00	43.38	A
ATOM	648	CD2	LEU	A	90	1.932	57.016	34.341	1.00	43.38	A
ATOM	649	C	LEU	A	90	4.990	54.028	34.683	1.00	100.03	A
ATOM	650	O	LEU	A	90	5.794	53.853	35.600	1.00	100.03	A
ATOM	651	N	ASP	A	91	4.627	53.064	33.845	1.00	82.00	A
ATOM	652	CA	ASP	A	91	5.131	51.692	33.935	1.00	82.00	A
ATOM	653	CB	ASP	A	91	5.334	51.115	32.531	1.00	100.07	A
ATOM	654	CG	ASP	A	91	6.270	51.954	31.685	1.00	100.07	A
ATOM	655	OD1	ASP	A	91	7.485	51.991	31.985	1.00	100.07	A
ATOM	656	OD2	ASP	A	91	5.783	52.582	30.717	1.00	100.07	A
ATOM	657	C	ASP	A	91	6.391	51.442	34.752	1.00	82.00	A
ATOM	658	O	ASP	A	91	7.498	51.752	34.318	1.00	82.00	A
ATOM	659	N	PRO	A	92	6.230	50.878	35.958	1.00	75.04	A
ATOM	660	CD	PRO	A	92	4.953	50.554	36.616	1.00	100.07	A
ATOM	661	CA	PRO	A	92	7.356	50.571	36.837	1.00	75.04	A
ATOM	662	CB	PRO	A	92	6.721	49.688	37.893	1.00	100.07	A
ATOM	663	CG	PRO	A	92	5.374	50.328	38.051	1.00	100.07	A
ATOM	664	C	PRO	A	92	8.396	49.840	36.007	1.00	75.04	A
ATOM	665	O	PRO	A	92	8.216	48.664	35.655	1.00	75.04	A
ATOM	666	N	ARG	A	93	9.457	50.578	35.680	1.00	100.07	A
ATOM	667	CA	ARG	A	93	10.584	50.115	34.869	1.00	100.07	A
ATOM	668	CB	ARG	A	93	10.444	48.626	34.537	1.00	100.07	A
ATOM	669	CG	ARG	A	93	11.763	47.913	34.422	1.00	100.07	A
ATOM	670	CD	ARG	A	93	12.626	48.210	35.641	1.00	100.07	A
ATOM	671	NE	ARG	A	93	13.974	47.675	35.493	1.00	100.07	A
ATOM	672	CZ	ARG	A	93	15.043	48.171	36.105	1.00	100.07	A
ATOM	673	NH1	ARG	A	93	14.919	49.220	36.909	1.00	100.07	A
ATOM	674	NH2	ARG	A	93	16.235	47.624	35.903	1.00	100.07	A
ATOM	675	C	ARG	A	93	10.591	50.940	33.581	1.00	100.07	A
ATOM	676	O	ARG	A	93</						

ATOM	719	CG	LEU	A	98	10.225	60.667	24.070	1.00	14.35	A
ATOM	720	CD1	LEU	A	98	9.781	61.881	24.863	1.00	14.35	A
ATOM	721	CD2	LEU	A	98	9.095	59.657	23.960	1.00	14.35	A
ATOM	722	C	LEU	A	98	11.518	60.220	20.451	1.00	50.75	A
ATOM	723	O	LEU	A	98	12.700	60.311	20.095	1.00	50.75	A
ATOM	724	N	ILE	A	99	10.475	60.437	19.654	1.00	47.11	A
ATOM	725	CA	ILE	A	99	10.587	60.809	18.262	1.00	47.11	A
ATOM	726	CB	ILE	A	99	9.811	59.852	17.384	1.00	41.20	A
ATOM	727	CG2	ILE	A	99	9.582	60.479	16.034	1.00	41.20	A
ATOM	728	CG1	ILE	A	99	10.541	58.514	17.290	1.00	41.20	A
ATOM	729	CD	ILE	A	99	11.838	58.567	16.494	1.00	41.20	A
ATOM	730	C	ILE	A	99	9.962	62.158	18.094	1.00	47.11	A
ATOM	731	O	ILE	A	99	9.129	62.560	18.888	1.00	47.11	A
ATOM	732	N	LEU	A	100	10.362	62.855	17.047	1.00	24.91	A
ATOM	733	CA	LEU	A	100	9.826	64.172	16.751	1.00	24.91	A
ATOM	734	CB	LEU	A	100	10.314	65.222	17.746	1.00	89.32	A
ATOM	735	CG	LEU	A	100	10.260	66.662	17.209	1.00	89.32	A
ATOM	736	CD1	LEU	A	100	8.948	66.937	16.494	1.00	89.32	A
ATOM	737	CD2	LEU	A	100	10.458	67.625	18.347	1.00	89.32	A
ATOM	738	C	LEU	A	100	10.312	64.540	15.389	1.00	24.91	A
ATOM	739	O	LEU	A	100	11.282	65.277	15.254	1.00	24.91	A
ATOM	740	N	ARG	A	101	9.637	64.010	14.380	1.00	83.85	A
ATOM	741	CA	ARG	A	101	10.007	64.266	13.002	1.00	83.85	A
ATOM	742	CB	ARG	A	101	9.584	63.072	12.126	1.00	100.07	A
ATOM	743	CG	ARG	A	101	10.640	62.603	11.118	1.00	100.07	A
ATOM	744	CD	ARG	A	101	10.512	61.104	10.804	1.00	100.07	A
ATOM	745	NE	ARG	A	101	11.748	60.552	10.237	1.00	100.07	A
ATOM	746	CZ	ARG	A	101	11.980	59.255	10.026	1.00	100.07	A
ATOM	747	NH1	ARG	A	101	11.055	58.354	10.334	1.00	100.07	A
ATOM	748	NH2	ARG	A	101	13.143	58.854	9.515	1.00	100.07	A
ATOM	749	C	ARG	A	101	9.348	65.555	12.520	1.00	83.85	A
ATOM	750	O	ARG	A	101	9.977	66.373	11.845	1.00	83.85	A
ATOM	751	N	ALA	A	102	8.088	65.733	12.908	1.00	35.68	A
ATOM	752	CA	ALA	A	102	7.281	66.885	12.516	1.00	35.68	A
ATOM	753	CB	ALA	A	102	6.218	67.171	13.578	1.00	52.49	A
ATOM	754	C	ALA	A	102	8.099	68.130	12.234	1.00	35.68	A
ATOM	755	O	ALA	A	102	8.750	68.679	13.124	1.00	35.68	A
ATOM	756	N	ALA	A	103	8.047	68.566	10.980	1.00	42.28	A
ATOM	757	CA	ALA	A	103	8.787	69.731	10.539	1.00	42.28	A
ATOM	758	CB	ALA	A	103	9.994	69.286	9.739	1.00	100.07	A
ATOM	759	C	ALA	A	103	7.947	70.713	9.735	1.00	42.28	A
ATOM	760	O									

ATOM	803	CZ	ARG	A	109	0.382	73.423	20.306	1.00100.07	A
ATOM	804	NH1	ARG	A	109	0.053	74.238	21.298	1.00100.07	A
ATOM	805	NH2	ARG	A	109	-0.536	73.027	19.438	1.00100.07	A
ATOM	806	C	ARG	A	109	6.520	71.091	21.492	1.00 23.54	A
ATOM	807	O	ARG	A	109	6.398	70.210	20.648	1.00 23.54	A
ATOM	808	N	ALA	A	110	6.655	70.823	22.786	1.00 50.26	A
ATOM	809	CA	ALA	A	110	6.725	69.446	23.295	1.00 50.26	A
ATOM	810	CB	ALA	A	110	6.742	69.455	24.823	1.00 70.58	A
ATOM	811	C	ALA	A	110	5.652	68.478	22.808	1.00 50.26	A
ATOM	812	O	ALA	A	110	5.957	67.321	22.510	1.00 50.26	A
ATOM	813	N	VAL	A	111	4.405	68.936	22.748	1.00 98.69	A
ATOM	814	CA	VAL	A	111	3.293	68.098	22.300	1.00 98.69	A
ATOM	815	CB	VAL	A	111	2.064	68.967	21.939	1.00100.07	A
ATOM	816	CG1	VAL	A	111	0.896	68.091	21.485	1.00100.07	A
ATOM	817	CG2	VAL	A	111	1.663	69.801	23.140	1.00100.07	A
ATOM	818	C	VAL	A	111	3.692	67.281	21.082	1.00 98.69	A
ATOM	819	O	VAL	A	111	3.751	66.051	21.139	1.00 98.69	A
ATOM	820	N	ASP	A	112	3.974	67.989	19.991	1.00 65.07	A
ATOM	821	CA	ASP	A	112	4.371	67.396	18.720	1.00 65.07	A
ATOM	822	CB	ASP	A	112	5.018	68.476	17.865	1.00 99.77	A
ATOM	823	CG	ASP	A	112	4.079	69.630	17.595	1.00 99.77	A
ATOM	824	OD1	ASP	A	112	3.135	69.448	16.801	1.00 99.77	A
ATOM	825	OD2	ASP	A	112	4.271	70.713	18.185	1.00 99.77	A
ATOM	826	C	ASP	A	112	5.308	66.207	18.869	1.00 65.07	A
ATOM	827	O	ASP	A	112	5.536	65.458	17.926	1.00 65.07	A
ATOM	828	N	PHE	A	113	5.860	66.035	20.058	1.00 61.73	A
ATOM	829	CA	PHE	A	113	6.746	64.921	20.301	1.00 61.73	A
ATOM	830	CB	PHE	A	113	7.319	65.006	21.705	1.00 56.73	A
ATOM	831	CG	PHE	A	113	8.798	65.124	21.730	1.00 56.73	A
ATOM	832	CD1	PHE	A	113	9.407	66.335	21.469	1.00 56.73	A
ATOM	833	CD2	PHE	A	113	9.588	64.012	21.984	1.00 56.73	A
ATOM	834	CE1	PHE	A	113	10.789	66.442	21.461	1.00 56.73	A
ATOM	835	CE2	PHE	A	113	10.962	64.108	21.977	1.00 56.73	A
ATOM	836	CZ	PHE	A	113	11.567	65.327	21.715	1.00 56.73	A
ATOM	837	C	PHE	A	113	5.964	63.630	20.159	1.00 61.73	A
ATOM	838	O	PHE	A	113	5.220	63.259	21.071	1.00 61.73	A
ATOM	839	N	THR	A	114	6.143	62.953	19.023	1.00 51.46	A
ATOM	840	CA	THR	A	114	5.463	61.689	18.735	1.00 51.46	A
ATOM	841	CB	THR	A	114	6.451	60.574	18.353	1.00 52.59	A
ATOM	842	OG1	THR	A	114	5.754	59.322	18.281	1.00 52.59	A
ATOM	843	CG2	THR	A	114	7.530	60.453	19.391	1.00 52.59	A
ATOM	844	C	THR	A	114	4.627	61.158	19.886	1.00 51.46	A
ATOM	845	O	THR	A	114	5.152	60.816	20.957	1.00 51.46	A
ATOM	8									

ATOM	887	O	GLU	A	120	5.307	62.459	29.901	1.00	94.10	A
ATOM	888	N	ILE	A	121	3.618	63.586	28.932	1.00	65.61	A
ATOM	889	CA	ILE	A	121	4.414	64.785	28.706	1.00	65.61	A
ATOM	890	CB	ILE	A	121	4.379	65.212	27.231	1.00	99.99	A
ATOM	891	CG2	ILE	A	121	5.350	66.360	26.993	1.00	99.99	A
ATOM	892	CG1	ILE	A	121	4.740	64.019	26.349	1.00	99.99	A
ATOM	893	CD	ILE	A	121	5.999	63.297	26.775	1.00	99.99	A
ATOM	894	C	ILE	A	121	3.890	65.924	29.573	1.00	65.61	A
ATOM	895	O	ILE	A	121	3.383	66.932	29.074	1.00	65.61	A
ATOM	896	N	MET	A	122	4.022	65.738	30.881	1.00	73.05	A
ATOM	897	CA	MET	A	122	3.583	66.696	31.883	1.00	73.05	A
ATOM	898	CB	MET	A	122	4.516	66.614	33.095	1.00	100.07	A
ATOM	899	CG	MET	A	122	3.825	66.738	34.449	1.00	100.07	A
ATOM	900	SD	MET	A	122	3.484	65.141	35.256	1.00	100.07	A
ATOM	901	CE	MET	A	122	2.173	64.515	34.188	1.00	100.07	A
ATOM	902	C	MET	A	122	3.520	68.138	31.385	1.00	73.05	A
ATOM	903	O	MET	A	122	2.609	68.887	31.745	1.00	73.05	A
ATOM	904	N	ASN	A	123	4.484	68.531	30.558	1.00	98.98	A
ATOM	905	CA	ASN	A	123	4.509	69.896	30.054	1.00	98.98	A
ATOM	906	CB	ASN	A	123	5.772	70.619	30.526	1.00	99.41	A
ATOM	907	CG	ASN	A	123	7.021	70.152	29.800	1.00	99.41	A
ATOM	908	OD1	ASN	A	123	7.420	68.994	29.902	1.00	99.41	A
ATOM	909	ND2	ASN	A	123	7.639	71.056	29.055	1.00	99.41	A
ATOM	910	C	ASN	A	123	4.437	69.985	28.543	1.00	98.98	A
ATOM	911	O	ASN	A	123	5.416	69.724	27.849	1.00	98.98	A
ATOM	912	N	PRO	A	124	3.265	70.337	28.005	1.00	50.62	A
ATOM	913	CD	PRO	A	124	2.027	70.802	28.648	1.00	100.07	A
ATOM	914	CA	PRO	A	124	3.169	70.452	26.551	1.00	50.62	A
ATOM	915	CB	PRO	A	124	1.679	70.610	26.327	1.00	100.07	A
ATOM	916	CG	PRO	A	124	1.289	71.460	27.488	1.00	100.07	A
ATOM	917	C	PRO	A	124	3.921	71.758	26.316	1.00	50.62	A
ATOM	918	O	PRO	A	124	4.892	72.051	27.024	1.00	50.62	A
ATOM	919	N	ASP	A	125	3.473	72.561	25.362	1.00	100.07	A
ATOM	920	CA	ASP	A	125	4.131	73.839	25.117	1.00	100.07	A
ATOM	921	CB	ASP	A	125	3.710	74.842	26.199	1.00	71.33	A
ATOM	922	CG	ASP	A	125	2.506	74.361	27.017	1.00	71.33	A
ATOM	923	OD1	ASP	A	125	1.415	74.196	26.440	1.00	71.33	A
ATOM	924	OD2	ASP	A	125	2.648	74.143	28.241	1.00	71.33	A
ATOM	925	C	ASP	A	125	5.666	73.702	25.089	1.00	100.07	A
ATOM	926	O	ASP	A	125	6.229	73.191	24.122	1.00	100.07	A
ATOM	927	N	LEU	A	126	6.333	74.162	26.146	1.00	27.66	A
ATOM	928	CA	LEU	A	126	7.789	74.085	26.264	1.00	27.66	A
ATOM	929	CB	LEU	A	126	8.174	72.657	26.651	1.00	48.42	A
ATOM	930	CG	LEU	A	126	9.651	72.263	26.779	1.00	48.42	A
ATOM	931	CD1	LEU	A	126	10.257	72.842	28.048	1.00	48.42	A
ATOM	932	CD2	LEU	A	126	9.759	70.747	26.804	1.00	48.42	A
ATOM	933	C	LEU	A	126	8.538	74.486	24.989	1.00	27.66	A
ATOM	934	O	LEU	A	126	9.587	73.915	24.698	1.00	27.66	A
ATOM	935	N	HIS	A	127	8.018	75.469	24.249	1.00	55.30	A
ATOM	936	CA	HIS	A	127	8.623	75.917	22.982	1.00	55.30	A
ATOM	937	CB	HIS	A	127	8.847	77.433	22.963	1.00	78.31	A
ATOM	938	CG	HIS	A	127	9.335	77.957	21.640	1.00	78.31	A
ATOM	939	CD2	HIS	A	127	8.997	79.067	20.940	1.00	78.31	A
ATOM	940	ND1	HIS	A	127	10.305	77.318	20.894	1.00	78.31	A
ATOM	941	CE1	HIS	A	127	10.541	78.011	19.794	1.00	78.31	A
ATOM	942	NE2	HIS	A	127	9.761	79.077	19.797	1.00	78.31	A
ATOM	943	C	HIS	A	127	9.945	75.246	22.645	1.00	55.30	A
ATOM	944	O	HIS	A	127	11.003	75.862	22.756	1.00	55.30	A
ATOM	945	N	ILE	A	128	9.900	73.992	22.224	1.00	32.89	A
ATOM	946	CA	ILE	A	128	11.143	73.328	21.912	1.00	32.89	A
ATOM	947	CB	ILE	A	128	10.933	71.841	21.579	1.00	28.75	A
ATOM	948	CG2	ILE	A	128	11.983	71.355	20.562	1.00	28.75	A
ATOM	949	CG1	ILE	A	128	10.986	71.030	22.871	1.00	28.75	A
ATOM	950	CD	ILE	A	128	11.375	69.573	22.673	1.00	28.75	A
ATOM	951	C	ILE	A	128	11.870	73.994	20.762	1.00	32.89	A
ATOM	952	O	ILE	A	128	13.098	74.063	20.783	1.00	32.89	A
ATOM	953	N	ALA	A	129	11.150	74.484	19.755	1.00	35.51	A
ATOM	954	CA	ALA	A	129	11.844	75.135	18.640	1.00	35.51	A
ATOM	955	CB	ALA	A	129	12.968	74.222	18.105	1.00	64.61	A
ATOM	956	C	ALA	A	129	11.002	75.620	17.468	1.00	35.51	A
ATOM	957	O	ALA	A	129	10.142	74.912	16.941	1.00	35.51	A
ATOM	958	N	THR	A	130	11.284	76.847	17.062	1.00	56.00	A
ATOM	959	CA	THR	A	130	10.614	77.454	15.938	1.00	56.00	A
ATOM	960	CB	THR	A	130	10.783	78.977	15.963	1.00	97.43	A
ATOM	961	OG1	THR	A	130	10.089	79.515	17.095	1.00	97.43	A
ATOM	962	CG2	THR	A	130	10.263	79.600	14.668	1.00	97.43	A
ATOM	963	C	THR	A	130	11.324	76.926	14.716	1.00	56.00	A
ATOM	964	O	THR	A	130	12.433	76.425	14.819	1.00	56.00	A
ATOM	965	N	LEU	A	131	10.678	77.017	13.566	1.00	96.96	A
ATOM	966	CA	LEU	A	131	11.262	76.591	12.303	1.00	96.96	A
ATOM	967	CB	LEU	A	131	11.596	75.069	12.278	1.00	14.70	A
ATOM	968	CG	LEU	A	131	10.673	73.901	12.679	1.00	14.70	A
ATOM	969	CD1	LEU	A	131	9.538	73.750	11.686	1.00	14.70	A
ATOM	970	CD2	LEU	A	131	11.487	72.612	12.725	1.00	14.70	A

ATOM	971	C	LEU	A	131	10.225	76.982	11.276	1.00	96.96	A
ATOM	972	O	LEU	A	131	9.037	77.057	11.586	1.00	96.96	A
ATOM	973	N	GLU	A	132	10.676	77.294	10.071	1.00	33.61	A
ATOM	974	CA	GLU	A	132	9.758	77.690	9.030	1.00	33.61	A
ATOM	975	CB	GLU	A	132	9.275	79.126	9.262	1.00	100.07	A
ATOM	976	CG	GLU	A	132	10.357	80.190	9.227	1.00	100.07	A
ATOM	977	CD	GLU	A	132	9.840	81.549	9.680	1.00	100.07	A
ATOM	978	OE1	GLU	A	132	9.431	81.657	10.860	1.00	100.07	A
ATOM	979	OE2	GLU	A	132	9.838	82.502	8.863	1.00	100.07	A
ATOM	980	O	GLU	A	132	10.375	77.546	7.558	1.00	33.61	A
ATOM	981	C	GLU	A	132	11.603	77.496	7.200	1.00	33.61	A
ATOM	982	N	GLU	A	133	9.488	77.448	6.667	1.00	83.31	A
ATOM	983	CA	GLU	A	133	9.816	77.309	5.253	1.00	83.31	A
ATOM	984	CB	GLU	A	133	10.514	78.582	4.768	1.00	100.07	A
ATOM	985	CG	GLU	A	133	10.593	78.703	3.256	1.00	100.07	A
ATOM	986	CD	GLU	A	133	11.146	80.045	2.793	1.00	100.07	A
ATOM	987	OE1	GLU	A	133	10.642	81.092	3.266	1.00	100.07	A
ATOM	988	OE2	GLU	A	133	12.072	80.049	1.946	1.00	100.07	A
ATOM	989	C	GLU	A	133	10.652	76.073	4.879	1.00	83.31	A
ATOM	990	O	GLU	A	133	10.635	75.630	3.728	1.00	83.31	A
ATOM	991	N	GLY	A	134	11.370	75.504	5.841	1.00	99.81	A
ATOM	992	CA	GLY	A	134	12.190	74.345	5.535	1.00	99.81	A
ATOM	993	C	GLY	A	134	12.147	73.242	6.571	1.00	99.81	A
ATOM	994	O	GLY	A	134	13.135	72.953	7.251	1.00	99.81	A
ATOM	995	N	GLY	A	135	10.986	72.615	6.678	1.00	100.07	A
ATOM	996	CA	GLY	A	135	10.808	71.535	7.625	1.00	100.07	A
ATOM	997	C	GLY	A	135	11.883	70.469	7.656	1.00	100.07	A
ATOM	998	O	GLY	A	135	11.861	69.498	6.894	1.00	100.07	A
ATOM	999	N	LYS	A	136	12.828	70.642	8.561	1.00	72.43	A
ATOM	1000	CA	LYS	A	136	13.899	69.685	8.702	1.00	72.43	A
ATOM	1001	CB	LYS	A	136	15.189	70.282	8.133	1.00	100.07	A
ATOM	1002	CG	LYS	A	136	16.330	69.291	7.911	1.00	100.07	A
ATOM	1003	CD	LYS	A	136	16.063	68.365	6.724	1.00	100.07	A
ATOM	1004	CE	LYS	A	136	17.254	67.452	6.455	1.00	100.07	A
ATOM	1005	NZ	LYS	A	136	16.977	66.466	5.374	1.00	100.07	A
ATOM	1006	C	LYS	A	136	14.006	69.535	10.199	1.00	72.43	A
ATOM	1007	O	LYS	A	136	14.514	70.438	10.852	1.00	72.43	A
ATOM	1008	N	LEU	A	137	13.513	68.441	10.774	1.00	56.42	A
ATOM	1009	CA	LEU	A	137	13.650	68.333	12.220	1.00	56.42	A
ATOM	1010	CB	LEU	A	137	12.468	69.017	12.903	1.00	27.01	A
ATOM	1011	CG	LEU	A	137	12.654	69.167	14.421			

ATOM	1055	CG	ARG	A	142	17.775	57.735	26.157	1.00	45.39	A
ATOM	1056	CD	ARG	A	142	19.112	57.119	26.362	1.00	45.39	A
ATOM	1057	NE	ARG	A	142	19.050	56.066	27.351	1.00	45.39	A
ATOM	1058	CZ	ARG	A	142	20.061	55.753	28.146	1.00	45.39	A
ATOM	1059	NH1	ARG	A	142	21.197	56.430	28.051	1.00	45.39	A
ATOM	1060	NH2	ARG	A	142	19.939	54.768	29.030	1.00	45.39	A
ATOM	1061	C	ARG	A	142	16.148	60.222	26.057	1.00	25.95	A
ATOM	1062	O	ARG	A	142	16.176	61.443	26.086	1.00	25.95	A
ATOM	1063	N	VAL	A	143	15.795	59.455	27.092	1.00	100.07	A
ATOM	1064	CA	VAL	A	143	15.426	59.953	28.421	1.00	100.07	A
ATOM	1065	CB	VAL	A	143	13.951	60.446	28.483	1.00	100.07	A
ATOM	1066	CG1	VAL	A	143	13.727	61.579	27.495	1.00	100.07	A
ATOM	1067	CG2	VAL	A	143	13.007	59.312	28.189	1.00	100.07	A
ATOM	1068	C	VAL	A	143	15.616	58.797	29.416	1.00	100.07	A
ATOM	1069	O	VAL	A	143	15.115	57.694	29.202	1.00	100.07	A
ATOM	1070	N	ASP	A	144	16.332	59.053	30.506	1.00	51.55	A
ATOM	1071	CA	ASP	A	144	16.632	58.012	31.495	1.00	51.55	A
ATOM	1072	CB	ASP	A	144	18.153	57.902	31.686	1.00	39.57	A
ATOM	1073	CG	ASP	A	144	18.863	57.204	30.532	1.00	39.57	A
ATOM	1074	OD1	ASP	A	144	18.664	57.585	29.353	1.00	39.57	A
ATOM	1075	OD2	ASP	A	144	19.645	56.272	30.822	1.00	39.57	A
ATOM	1076	C	ASP	A	144	16.017	58.180	32.881	1.00	51.55	A
ATOM	1077	O	ASP	A	144	15.578	59.262	33.263	1.00	51.55	A
ATOM	1078	N	ARG	A	145	16.003	57.093	33.644	1.00	64.20	A
ATOM	1079	CA	ARG	A	145	15.492	57.149	35.001	1.00	64.20	A
ATOM	1080	CB	ARG	A	145	15.285	55.736	35.561	1.00	99.82	A
ATOM	1081	CG	ARG	A	145	14.184	55.627	36.619	1.00	99.82	A
ATOM	1082	CD	ARG	A	145	12.803	55.635	35.970	1.00	99.82	A
ATOM	1083	NE	ARG	A	145	11.743	56.001	36.906	1.00	99.82	A
ATOM	1084	CZ	ARG	A	145	10.455	56.077	36.585	1.00	99.82	A
ATOM	1085	NH1	ARG	A	145	10.059	55.806	35.351	1.00	99.82	A
ATOM	1086	NH2	ARG	A	145	9.565	56.442	37.494	1.00	99.82	A
ATOM	1087	C	ARG	A	145	16.642	57.841	35.721	1.00	64.20	A
ATOM	1088	O	ARG	A	145	17.790	57.689	35.318	1.00	64.20	A
ATOM	1089	N	GLY	A	146	16.368	58.608	36.766	1.00	85.65	A
ATOM	1090	CA	GLY	A	146	17.482	59.259	37.424	1.00	85.65	A
ATOM	1091	C	GLY	A	146	17.289	59.789	38.825	1.00	85.65	A
ATOM	1092	O	GLY	A	146	16.175	59.926	39.330	1.00	85.65	A
ATOM	1093	N	VAL	A	147	18.421	60.099	39.443	1.00	74.35	A
ATOM	1094	CA	VAL	A	147	18.476	60.624	40.792	1.00	74.35	A
ATOM	1095	CB	VAL	A	147	18.627	59.499	41.796	1.00	36.54	A
ATOM	1096	CG1	VAL	A	147	18.898	60.070	43.181	1.00	36.54	A
ATOM	1097	CG2	VAL	A	147	17.383	58.628	41.771	1.00	36.54	A
ATOM	1098	C	VAL	A	147	19.695	61.514	40.878	1.00	74.35	A
ATOM	1099	O	VAL	A	147	20.760	61.174	40.357	1.00	74.35	A
ATOM	1100	N	GLY	A	148	19.547	62.650	41.538	1.00	50.28	A
ATOM	1101	CA	GLY	A	148	20.673	63.553	41.650	1.00	50.28	A
ATOM	1102	C	GLY	A	148	20.896	64.253	40.322	1.00	50.28	A
ATOM	1103	O	GLY	A	148	20.062	64.160	39.411	1.00	50.28	A
ATOM	1104	N	TYR	A	149	22.031	64.941	40.212	1.00	65.06	A
ATOM	1105	CA	TYR	A	149	22.396	65.694	39.015	1.00	65.06	A
ATOM	1106	CB	TYR	A	149	22.614	67.157	39.419	1.00	46.08	A
ATOM	1107	CG	TYR	A	149	23.368	68.042	38.448	1.00	46.08	A
ATOM	1108	CD1	TYR	A	149	23.036	68.092	37.098	1.00	46.08	A
ATOM	1109	CE1	TYR	A	149	23.700	68.964	36.226	1.00	46.08	A
ATOM	1110	CD2	TYR	A	149	24.385	68.882	38.904	1.00	46.08	A
ATOM	1111	CE2	TYR	A	149	25.052	69.750	38.043	1.00	46.08	A
ATOM	1112	CZ	TYR	A	149	24.708	69.787	36.708	1.00	46.08	A
ATOM	1113	OH	TYR	A	149	25.384	70.637	35.866	1.00	46.08	A
ATOM	1114	C	TYR	A	149	23.645	65.122	38.380	1.00	65.06	A
ATOM	1115	O	TYR	A	149	24.665	64.975	39.043	1.00	65.06	A
ATOM	1116	N	VAL	A	150	23.557	64.778	37.100	1.00	45.82	A
ATOM	1117	CA	VAL	A	150	24.702	64.230	36.381	1.00	45.82	A
ATOM	1118	CB	VAL	A	150	24.612	62.709	36.233	1.00	23.65	A
ATOM	1119	CG1	VAL	A	150	25.897	62.185	35.631	1.00	23.65	A
ATOM	1120	CG2	VAL	A	150	24.388	62.075	37.588	1.00	23.65	A
ATOM	1121	C	VAL	A	150	24.774	64.872	35.012	1.00	45.82	A
ATOM	1122	O	VAL	A	150	23.782	64.947	34.298	1.00	45.82	A
ATOM	1123	N	PRO	A	151	25.962	65.347	34.630	1.00	38.98	A
ATOM	1124	CD	PRO	A	151	27.109	65.558	35.532	1.00	32.54	A
ATOM	1125	CA	PRO	A	151	26.179	66.006	33.340	1.00	38.98	A
ATOM	1126	CB	PRO	A	151	26.842	67.290	33.764	1.00	32.54	A
ATOM	1127	CG	PRO	A	151	27.754	66.801	34.962	1.00	32.54	A
ATOM	1128	C	PRO	A	151	27.057	65.214	32.397	1.00	38.98	A
ATOM	1129	O	PRO	A	151	27.363	64.055	32.666	1.00	38.98	A
ATOM	1130	N	ALA	A	152	27.456	65.851	31.296	1.00	38.13	A
ATOM	1131	CA	ALA	A	152	28.338	65.221	30.315	1.00	38.13	A
ATOM	1132	CB	ALA	A	152	28.853	66.249	29.321	1.00	57.22	A
ATOM	1133	C	ALA	A	152	29.507	64.555	31.041	1.00	38.13	A
ATOM	1134	O	ALA	A	152	30.630	65.079	31.115	1.00	38.13	A
ATOM	1135	N	GLU	A	153	29.184	63.394	31.595	1.00	100.07	A
ATOM	1136	CA	GLU	A	153	30.083	62.531	32.330	1.00	100.07	A
ATOM	1137	CB	GLU	A	153	29.921	62.750	33.830	1.00	63.28	A
ATOM	1138	CG	GLU	A	153	30.804	61.861	34.672	1.00	63.28	A

ATOM	1139	CD	GLU	A	153	30.083	61.327	35.895	1.00	63.28	A
ATOM	1140	OE1	GLU	A	153	29.707	62.134	36.775	1.00	63.28	A
ATOM	1141	OE2	GLU	A	153	29.884	60.094	35.972	1.00	63.28	A
ATOM	1142	C	GLU	A	153	29.514	61.186	31.918	1.00100.07	A	A
ATOM	1143	O	GLU	A	153	30.248	60.266	31.557	1.00100.07	A	A
ATOM	1144	N	ARG	A	154	28.184	61.101	31.948	1.00	97.84	A
ATOM	1145	CA	ARG	A	154	27.480	59.892	31.549	1.00	97.84	A
ATOM	1146	CB	ARG	A	154	26.333	59.588	32.509	1.00100.07	A	A
ATOM	1147	CG	ARG	A	154	26.835	59.067	33.858	1.00100.07	A	A
ATOM	1148	CD	ARG	A	154	25.753	58.328	34.644	1.00100.07	A	A
ATOM	1149	NE	ARG	A	154	26.273	57.725	35.874	1.00100.07	A	A
ATOM	1150	CZ	ARG	A	154	25.573	56.915	36.665	1.00100.07	A	A
ATOM	1151	NH1	ARG	A	154	24.319	56.607	36.358	1.00100.07	A	A
ATOM	1152	NH2	ARG	A	154	26.128	56.407	37.760	1.00100.07	A	A
ATOM	1153	C	ARG	A	154	26.980	60.063	30.130	1.00	97.84	A
ATOM	1154	O	ARG	A	154	25.929	60.668	29.889	1.00	97.84	A
ATOM	1155	N	HIS	A	155	27.777	59.526	29.206	1.00	33.73	A
ATOM	1156	CA	HIS	A	155	27.547	59.567	27.759	1.00	33.73	A
ATOM	1157	CB	HIS	A	155	28.605	58.703	27.087	1.00100.07	A	A
ATOM	1158	CG	HIS	A	155	28.798	57.374	27.753	1.00100.07	A	A
ATOM	1159	CD2	HIS	A	155	28.156	56.191	27.590	1.00100.07	A	A
ATOM	1160	ND1	HIS	A	155	29.743	57.164	28.734	1.00100.07	A	A
ATOM	1161	CE1	HIS	A	155	29.680	55.908	29.141	1.00100.07	A	A
ATOM	1162	NE2	HIS	A	155	28.725	55.296	28.462	1.00100.07	A	A
ATOM	1163	C	HIS	A	155	26.181	59.164	27.167	1.00	33.73	A
ATOM	1164	O	HIS	A	155	25.329	58.515	27.808	1.00	33.73	A
ATOM	1165	N	GLY	A	156	26.008	59.551	25.906	1.00	73.63	A
ATOM	1166	CA	GLY	A	156	24.810	59.225	25.156	1.00	73.63	A
ATOM	1167	C	GLY	A	156	25.191	58.230	24.065	1.00	73.63	A
ATOM	1168	O	GLY	A	156	24.863	58.409	22.889	1.00	73.63	A
ATOM	1169	N	ILE	A	157	25.909	57.180	24.462	1.00100.07	A	A
ATOM	1170	CA	ILE	A	157	26.344	56.139	23.535	1.00100.07	A	A
ATOM	1171	CB	ILE	A	157	27.412	55.195	24.182	1.00100.07	A	A
ATOM	1172	CG2	ILE	A	157	27.894	54.156	23.169	1.00100.07	A	A
ATOM	1173	CG1	ILE	A	157	28.614	56.005	24.683	1.00100.07	A	A
ATOM	1174	CD	ILE	A	157	29.309	56.847	23.646	1.00100.07	A	A
ATOM	1175	C	ILE	A	157	25.139	55.307	23.103	1.00100.07	A	A
ATOM	1176	O	ILE	A	157	25.145	54.081	23.220	1.00100.07	A	A
ATOM	1177	N	LYS	A	158	24.103	55.985	22.615	1.00	86.89	A
ATOM	1178	CA	LYS	A	158	22.887	55.322	22.154	1.00	86.89	A
ATOM	1179	CB	LYS	A	158	21.673	56.195	22.471	1.00	94.08	A
ATOM	1180	CG	LYS	A	158	20.346	55.588	22.071	1.00	94.08	A
ATOM	1181	CD	LYS	A	158	19.275	56.658	21.978	1.00	94.08	A
ATOM	1182	CE	LYS	A	158	18.080	56.183	21.166	1.00	94.08	A
ATOM	1183	NZ	LYS	A	158	17.231	57.331	20.740	1.00	94.08	A
ATOM	1184	C	LYS	A	158	23.019	55.136	20.647	1.00	86.89	A
ATOM	1185	O	LYS	A	158	23.473	54.091	20.170	1.00	86.89	A
ATOM	1186	N	ASP	A	159	22.618	56.159	19.902	1.00	37.45	A
ATOM	1187	CA	ASP	A	159	22.722	56.139	18.448	1.00	37.45	A
ATOM	1188	CB	ASP	A	159	21.834	57.243	17.857	1.00100.07	A	A
ATOM	1189	CG	ASP	A	159	21.704	57.154	16.349	1.00100.07	A	A
ATOM	1190	OD1	ASP	A	159	22.702	57.415	15.642	1.00100.07	A	A
ATOM	1191	OD2	ASP	A	159	20.598	56.825	15.869	1.00100.07	A	A
ATOM	1192	C	ASP	A	159	24.198	56.424	18.190	1.00	37.45	A
ATOM	1193	O	ASP	A	159	24.554	57.212	17.305	1.00	37.45	A
ATOM	1194	N	ARG	A	160	25.040	55.776	18.998	1.00100.07	A	A
ATOM	1195	CA	ARG	A	160	26.490	55.930	18.945	1.00100.07	A	A
ATOM	1196	CB	ARG	A	160	27.194	54.577	19.099	1.00100.07	A	A
ATOM	1197	CG	ARG	A	160	28.723	54.671	18.980	1.00100.07	A	A
ATOM	1198	CD	ARG	A	160	29.369	55.377	20.176	1.00100.07	A	A
ATOM	1199	NE	ARG	A	160	30.564	56.136	19.801	1.00100.07	A	A
ATOM	1200	CZ	ARG	A	160	31.557	56.443	20.634	1.00100.07	A	A
ATOM	1201	NH1	ARG	A	160	31.515	56.051	21.903	1.00100.07	A	A
ATOM	1202	NH2	ARG	A	160	32.592	57.152	20.199	1.00100.07	A	A
ATOM	1203	C	ARG	A	160	26.941	56.589	17.664	1.00100.07	A	A
ATOM	1204	O	ARG	A	160	27.352	55.892	16.737	1.00100.07	A	A
ATOM	1205	N	ILE	A	161	26.860	57.922	17.610	1.00	52.94	A
ATOM	1206	CA	ILE	A	161	27.275	58.641	16.413	1.00	52.94	A
ATOM	1207	CB	ILE	A	161	26.764	57.886	15.141	1.00	60.99	A
ATOM	1208	CG2	ILE	A	161	26.149	58.843	14.152	1.00	60.99	A
ATOM	1209	CG1	ILE	A	161	27.925	57.115	14.500	1.00	60.99	A
ATOM	1210	CD	ILE	A	161	27.504	55.849	13.786	1.00	60.99	A
ATOM	1211	C	ILE	A	161	26.923	60.117	16.264	1.00	52.94	A
ATOM	1212	O	ILE	A	161	27.590	60.840	15.522	1.00	52.94	A
ATOM	1213	N	ASN	A	162	25.878	60.572	16.939	1.00	99.95	A
ATOM	1214	CA	ASN	A	162	25.502	61.975	16.837	1.00	99.95	A
ATOM	1215	CB	ASN	A	162	24.505	62.166	15.694	1.00	96.68	A
ATOM	1216	CG	ASN	A	162	24.995	61.559	14.386	1.00	96.68	A
ATOM	1217	OD1	ASN	A	162	26.119	61.810	13.947	1.00	96.68	A
ATOM	1218	ND2	ASN	A	162	24.146	60.756	13.757	1.00	96.68	A
ATOM	1219	C	ASN	A	162	24.905	62.399	18.163	1.00	99.95	A
ATOM	1220	O	ASN	A	162	24.515	63.544	18.365	1.00	99.95	A
ATOM	1221	N	ALA	A	163	24.872	61.437	19.066	1.00	51.97	A
ATOM	1222	CA	ALA	A	163	24.337	61.587	20.402	1.00	51.97	A





ATOM	1307	NH1	ARG	A	174	14.956	74.265	39.343	1.00100.00	A
ATOM	1308	NH2	ARG	A	174	14.376	75.714	37.656	1.00100.00	A
ATOM	1309	C	ARG	A	174	11.452	73.469	43.137	1.00 51.23	A
ATOM	1310	O	ARG	A	174	11.802	74.567	42.717	1.00 51.23	A
ATOM	1311	N	ARG	A	175	11.221	73.245	44.422	1.00 24.40	A
ATOM	1312	CA	ARG	A	175	11.333	74.302	45.419	1.00 24.40	A
ATOM	1313	CB	ARG	A	175	10.472	75.484	44.973	1.00 46.83	A
ATOM	1314	CG	ARG	A	175	10.416	76.649	45.911	1.00 46.83	A
ATOM	1315	CD	ARG	A	175	9.769	77.818	45.203	1.00 46.83	A
ATOM	1316	NE	ARG	A	175	9.080	78.729	46.115	1.00 46.83	A
ATOM	1317	CZ	ARG	A	175	8.459	79.841	45.725	1.00 46.83	A
ATOM	1318	NH1	ARG	A	175	8.449	80.181	44.437	1.00 46.83	A
ATOM	1319	NH2	ARG	A	175	7.837	80.608	46.616	1.00 46.83	A
ATOM	1320	C	ARG	A	175	10.808	73.652	46.703	1.00 24.40	A
ATOM	1321	O	ARG	A	175	9.964	72.769	46.633	1.00 24.40	A
ATOM	1322	N	VAL	A	176	11.312	74.057	47.864	1.00 50.40	A
ATOM	1323	CA	VAL	A	176	10.875	73.467	49.137	1.00 50.40	A
ATOM	1324	CB	VAL	A	176	11.639	72.126	49.452	1.00 5.23	A
ATOM	1325	CG1	VAL	A	176	11.188	71.565	50.791	1.00 5.23	A
ATOM	1326	CG2	VAL	A	176	11.447	71.110	48.351	1.00 5.23	A
ATOM	1327	C	VAL	A	176	11.108	74.403	50.333	1.00 50.40	A
ATOM	1328	O	VAL	A	176	12.242	74.536	50.827	1.00 50.40	A
ATOM	1329	N	ALA	A	177	10.038	75.040	50.802	1.00 73.68	A
ATOM	1330	CA	ALA	A	177	10.125	75.936	51.955	1.00 73.68	A
ATOM	1331	CB	ALA	A	177	9.717	77.367	51.551	1.00 18.59	A
ATOM	1332	C	ALA	A	177	9.208	75.400	53.057	1.00 73.68	A
ATOM	1333	O	ALA	A	177	8.647	74.312	52.927	1.00 73.68	A
ATOM	1334	N	PHE	A	178	9.082	76.144	54.148	1.00100.07	A
ATOM	1335	CA	PHE	A	178	8.196	75.751	55.239	1.00100.07	A
ATOM	1336	CB	PHE	A	178	8.518	74.313	55.714	1.00 30.14	A
ATOM	1337	CG	PHE	A	178	9.759	74.172	56.548	1.00 30.14	A
ATOM	1338	CD1	PHE	A	178	9.782	74.587	57.876	1.00 30.14	A
ATOM	1339	CD2	PHE	A	178	10.877	73.523	56.038	1.00 30.14	A
ATOM	1340	CE1	PHE	A	178	10.905	74.343	58.685	1.00 30.14	A
ATOM	1341	CE2	PHE	A	178	12.005	73.279	56.844	1.00 30.14	A
ATOM	1342	CZ	PHE	A	178	12.014	73.686	58.162	1.00 30.14	A
ATOM	1343	C	PHE	A	178	8.211	76.770	56.372	1.00100.07	A
ATOM	1344	O	PHE	A	178	8.983	77.725	56.325	1.00100.07	A
ATOM	1345	N	GLN	A	179	7.350	76.605	57.370	1.00 51.57	A
ATOM	1346	CA	GLN	A	179	7.318	77.579	58.457	1.00 51.57	A
ATOM	1347	CB	GLN	A	179	6.322	78.681	58.113	1.00 99.76	A
ATOM	1348	CG	GLN	A	179	6.833	79.639	57.071	1.00 99.76	A
ATOM	1349	CD	GLN	A	179	5.748	80.537	56.544	1.00 99.76	A
ATOM	1350	OE1	GLN	A	179	4.724	80.740	57.200	1.00 99.76	A
ATOM	1351	NE2	GLN	A	179	5.966	81.094	55.356	1.00 99.76	A
ATOM	1352	C	GLN	A	179	6.960	76.979	59.805	1.00 51.57	A
ATOM	1353	O	GLN	A	179	6.040	76.175	59.915	1.00 51.57	A
ATOM	1354	N	VAL	A	180	7.693	77.362	60.835	1.00 86.87	A
ATOM	1355	CA	VAL	A	180	7.386	76.852	62.154	1.00 86.87	A
ATOM	1356	CB	VAL	A	180	8.669	76.574	62.958	1.00 48.36	A
ATOM	1357	CG1	VAL	A	180	8.313	76.074	64.349	1.00 48.36	A
ATOM	1358	CG2	VAL	A	180	9.525	75.543	62.231	1.00 48.36	A
ATOM	1359	C	VAL	A	180	6.541	77.915	62.845	1.00 86.87	A
ATOM	1360	O	VAL	A	180	7.072	78.856	63.437	1.00 86.87	A
ATOM	1361	N	GLU	A	181	5.221	77.768	62.746	1.00100.07	A
ATOM	1362	CA	GLU	A	181	4.273	78.712	63.343	1.00100.07	A
ATOM	1363	CB	GLU	A	181	2.938	78.666	62.596	1.00 72.17	A
ATOM	1364	CG	GLU	A	181	3.031	78.951	61.128	1.00 72.17	A
ATOM	1365	CD	GLU	A	181	3.100	80.429	60.840	1.00 72.17	A
ATOM	1366	OE1	GLU	A	181	3.556	81.181	61.734	1.00 72.17	A
ATOM	1367	OE2	GLU	A	181	2.707	80.832	59.718	1.00 72.17	A
ATOM	1368	C	GLU	A	181	3.978	78.365	64.784	1.00100.07	A
ATOM	1369	O	GLU	A	181	4.394	77.320	65.290	1.00100.07	A
ATOM	1370	N	ASP	A	182	3.236	79.254	65.431	1.00 99.56	A
ATOM	1371	CA	ASP	A	182	2.823	79.048	66.805	1.00 99.56	A
ATOM	1372	CB	ASP	A	182	2.886	80.361	67.581	1.00100.07	A
ATOM	1373	CG	ASP	A	182	4.304	80.790	67.867	1.00100.07	A
ATOM	1374	OD1	ASP	A	182	5.052	79.988	68.473	1.00100.07	A
ATOM	1375	OD2	ASP	A	182	4.664	81.923	67.488	1.00100.07	A
ATOM	1376	C	ASP	A	182	1.391	78.534	66.733	1.00 99.56	A
ATOM	1377	O	ASP	A	182	0.493	79.223	66.240	1.00 99.56	A
ATOM	1378	N	THR	A	183	1.189	77.308	67.205	1.00100.07	A
ATOM	1379	CA	THR	A	183	-0.129	76.702	67.180	1.00100.07	A
ATOM	1380	CB	THR	A	183	-0.071	75.216	67.606	1.00100.07	A
ATOM	1381	OG1	THR	A	183	-1.405	74.709	67.744	1.00100.07	A
ATOM	1382	CG2	THR	A	183	0.677	75.057	68.924	1.00100.07	A
ATOM	1383	C	THR	A	183	-1.123	77.431	68.063	1.00100.07	A
ATOM	1384	O	THR	A	183	-1.615	78.512	67.708	1.00100.07	A
ATOM	1385	N	ARG	A	184	-1.393	76.822	69.217	1.00 69.50	A
ATOM	1386	CA	ARG	A	184	-2.334	77.313	70.216	1.00 69.50	A
ATOM	1387	CB	ARG	A	184	-3.382	78.244	69.568	1.00100.07	A
ATOM	1388	CG	ARG	A	184	-4.731	78.353	70.288	1.00100.07	A
ATOM	1389	CD	ARG	A	184	-5.779	77.375	69.723	1.00100.07	A
ATOM	1390	NE	ARG	A	184	-7.057	77.467	70.440	1.00100.07	A

ATOM	1391	CZ	ARG	A	184	-8.110	76.672	70.234	1.00100.07	A
ATOM	1392	NH1	ARG	A	184	-8.056	75.707	69.322	1.00100.07	A
ATOM	1393	NH2	ARG	A	184	-9.219	76.834	70.953	1.00100.07	A
ATOM	1394	C	ARG	A	184	-3.021	76.056	70.750	1.00 69.50	A
ATOM	1395	O	ARG	A	184	-3.281	75.096	70.013	1.00 69.50	A
ATOM	1396	N	LEU	A	185	-3.315	76.099	72.041	1.00100.07	A
ATOM	1397	CA	LEU	A	185	-3.944	75.016	72.775	1.00100.07	A
ATOM	1398	CB	LEU	A	185	-5.447	74.934	72.482	1.00 86.73	A
ATOM	1399	CG	LEU	A	185	-6.248	75.931	73.343	1.00 86.73	A
ATOM	1400	CD1	LEU	A	185	-7.725	75.600	73.244	1.00 86.73	A
ATOM	1401	CD2	LEU	A	185	-5.800	75.865	74.810	1.00 86.73	A
ATOM	1402	C	LEU	A	185	-3.293	73.641	72.709	1.00100.07	A
ATOM	1403	O	LEU	A	185	-3.091	73.043	71.649	1.00100.07	A
ATOM	1404	N	GLY	A	186	-2.973	73.175	73.910	1.00100.07	A
ATOM	1405	CA	GLY	A	186	-2.315	71.908	74.137	1.00100.07	A
ATOM	1406	C	GLY	A	186	-1.383	72.200	75.302	1.00100.07	A
ATOM	1407	O	GLY	A	186	-0.848	71.295	75.959	1.00100.07	A
ATOM	1408	N	GLN	A	187	-1.226	73.504	75.546	1.00100.07	A
ATOM	1409	CA	GLN	A	187	-0.386	74.080	76.597	1.00100.07	A
ATOM	1410	CB	GLN	A	187	0.836	73.186	76.860	1.00 98.59	A
ATOM	1411	CG	GLN	A	187	1.811	73.705	77.904	1.00 98.59	A
ATOM	1412	CD	GLN	A	187	2.936	72.722	78.190	1.00 98.59	A
ATOM	1413	OE1	GLN	A	187	3.609	72.250	77.276	1.00 98.59	A
ATOM	1414	NE2	GLN	A	187	3.146	72.414	79.464	1.00 98.59	A
ATOM	1415	C	GLN	A	187	0.065	75.445	76.086	1.00100.07	A
ATOM	1416	O	GLN	A	187	-0.259	75.827	74.960	1.00100.07	A
ATOM	1417	N	ARG	A	188	0.820	76.176	76.899	1.00 99.87	A
ATOM	1418	CA	ARG	A	188	1.279	77.503	76.506	1.00 99.87	A
ATOM	1419	CB	ARG	A	188	2.149	78.112	77.612	1.00100.07	A
ATOM	1420	CG	ARG	A	188	1.317	78.786	78.700	1.00100.07	A
ATOM	1421	CD	ARG	A	188	2.167	79.285	79.857	1.00100.07	A
ATOM	1422	NE	ARG	A	188	1.411	80.204	80.707	1.00100.07	A
ATOM	1423	CZ	ARG	A	188	1.877	80.766	81.820	1.00100.07	A
ATOM	1424	NH1	ARG	A	188	3.111	80.505	82.239	1.00100.07	A
ATOM	1425	NH2	ARG	A	188	1.107	81.602	82.509	1.00100.07	A
ATOM	1426	C	ARG	A	188	1.980	77.592	75.153	1.00 99.87	A
ATOM	1427	O	ARG	A	188	2.854	76.787	74.831	1.00 99.87	A
ATOM	1428	N	THR	A	189	1.559	78.587	74.374	1.00100.07	A
ATOM	1429	CA	THR	A	189	2.077	78.863	73.033	1.00100.07	A
ATOM	1430	CB	THR	A	189	2.503	80.348	72.881	1.00100.07	A
ATOM	1431	OG1	THR	A	189	1.332	81.167	72.741	1.00100.07	A
ATOM	1432	CG2	THR	A	189	3.408	80.534	71.651	1.00100.07	A
ATOM	1433	C	THR	A	189	3.238	77.991	72.568	1.00100.07	A
ATOM	1434	O	THR	A	189	3.096	77.227	71.605	1.00100.07	A
ATOM	1435	N	ASP	A	190	4.382	78.137	73.240	1.00 96.21	A
ATOM	1436	CA	ASP	A	190	5.588	77.376	72.926	1.00 96.21	A
ATOM	1437	CB	ASP	A	190	5.867	76.334	74.019	1.00 99.97	A
ATOM	1438	CG	ASP	A	190	6.367	76.943	75.313	1.00 99.97	A
ATOM	1439	OD1	ASP	A	190	7.403	77.643	75.273	1.00 99.97	A
ATOM	1440	OD2	ASP	A	190	5.732	76.708	76.368	1.00 99.97	A
ATOM	1441	C	ASP	A	190	5.452	76.630	71.616	1.00 96.21	A
ATOM	1442	O	ASP	A	190	5.961	77.051	70.580	1.00 96.21	A
ATOM	1443	N	LEU	A	191	4.745	75.510	71.706	1.00 88.88	A
ATOM	1444	CA	LEU	A	191	4.483	74.620	70.594	1.00 88.88	A
ATOM	1445	CB	LEU	A	191	3.076	74.051	70.700	1.00 82.14	A
ATOM	1446	CG	LEU	A	191	2.676	73.433	72.032	1.00 82.14	A
ATOM	1447	CD1	LEU	A	191	1.383	72.671	71.805	1.00 82.14	A
ATOM	1448	CD2	LEU	A	191	3.769	72.508	72.566	1.00 82.14	A
ATOM	1449	C	LEU	A	191	4.660	75.214	69.212	1.00 88.88	A
ATOM	1450	O	LEU	A	191	4.358	76.388	68.967	1.00 88.88	A
ATOM	1451	N	ASP	A	192	5.134	74.360	68.310	1.00 97.03	A
ATOM	1452	CA	ASP	A	192	5.383	74.718	66.927	1.00 97.03	A
ATOM	1453	CB	ASP	A	192	6.744	74.172	66.494	1.00100.07	A
ATOM	1454	CG	ASP	A	192	7.785	74.256	67.596	1.00100.07	A
ATOM	1455	OD1	ASP	A	192	8.067	75.379	68.066	1.00100.07	A
ATOM	1456	OD2	ASP	A	192	8.321	73.198	67.994	1.00100.07	A
ATOM	1457	C	ASP	A	192	4.294	74.099	66.052	1.00 97.03	A
ATOM	1458	O	ASP	A	192	3.673	73.110	66.439	1.00 97.03	A
ATOM	1459	N	LYS	A	193	4.066	74.685	64.880	1.00 30.13	A
ATOM	1460	CA	LYS	A	193	3.073	74.182	63.936	1.00 30.13	A
ATOM	1461	CB	LYS	A	193	1.833	75.071	63.963	1.00 88.42	A
ATOM	1462	CG	LYS	A	193	0.919	74.908	62.762	1.00 88.42	A
ATOM	1463	CD	LYS	A	193	0.025	76.119	62.617	1.00 88.42	A
ATOM	1464	CE	LYS	A	193	-0.670	76.138	61.280	1.00 88.42	A
ATOM	1465	NZ	LYS	A	193	-1.297	77.462	61.048	1.00 88.42	A
ATOM	1466	C	LYS	A	193	3.670	74.183	62.527	1.00 30.13	A
ATOM	1467	O	LYS	A	193	3.632	75.212	61.836	1.00 30.13	A
ATOM	1468	N	LEU	A	194	4.205	73.030	62.105	1.00 31.31	A
ATOM	1469	CA	LEU	A	194	4.850	72.873	60.790	1.00 31.31	A
ATOM	1470	CB	LEU	A	194	5.268	71.422	60.604	1.00 34.90	A
ATOM	1471	CG	LEU	A	194	6.671	71.285	60.020	1.00 34.90	A
ATOM	1472	CD1	LEU	A	194	7.490	70.294	60.834	1.00 34.90	A
ATOM	1473	CD2	LEU	A	194	6.566	70.857	58.590	1.00 34.90	A
ATOM	1474	C	LEU	A	194	3.964	73.315	59.630	1.00 31.31	A

ATOM	1475	O	LEU	A	194	2.958	73.993	59.844	1.00	31.31	A
ATOM	1476	N	THR	A	195	4.321	72.941	58.404	1.00	32.61	A
ATOM	1477	CA	THR	A	195	3.510	73.364	57.265	1.00	32.61	A
ATOM	1478	CB	THR	A	195	3.084	74.840	57.441	1.00	82.69	A
ATOM	1479	OG1	THR	A	195	2.132	75.199	56.436	1.00	82.69	A
ATOM	1480	CG2	THR	A	195	4.301	75.756	57.332	1.00	82.69	A
ATOM	1481	C	THR	A	195	4.193	73.264	55.900	1.00	32.61	A
ATOM	1482	O	THR	A	195	3.767	73.942	54.966	1.00	32.61	A
ATOM	1483	N	LEU	A	196	5.217	72.424	55.751	1.00	44.55	A
ATOM	1484	CA	LEU	A	196	5.933	72.366	54.470	1.00	44.55	A
ATOM	1485	CB	LEU	A	196	7.018	71.281	54.486	1.00	31.90	A
ATOM	1486	CG	LEU	A	196	6.714	69.816	54.729	1.00	31.90	A
ATOM	1487	CD1	LEU	A	196	7.990	69.100	55.175	1.00	31.90	A
ATOM	1488	CD2	LEU	A	196	5.669	69.706	55.793	1.00	31.90	A
ATOM	1489	C	LEU	A	196	5.105	72.265	53.216	1.00	44.55	A
ATOM	1490	O	LEU	A	196	4.207	71.433	53.108	1.00	44.55	A
ATOM	1491	N	ARG	A	197	5.433	73.146	52.273	1.00	46.84	A
ATOM	1492	CA	ARG	A	197	4.737	73.253	50.997	1.00	46.84	A
ATOM	1493	CB	ARG	A	197	4.976	74.644	50.402	1.00	54.72	A
ATOM	1494	CG	ARG	A	197	4.749	75.804	51.384	1.00	54.72	A
ATOM	1495	CD	ARG	A	197	4.243	77.010	50.621	1.00	54.72	A
ATOM	1496	NE	ARG	A	197	4.582	78.285	51.237	1.00	54.72	A
ATOM	1497	CZ	ARG	A	197	4.340	79.459	50.659	1.00	54.72	A
ATOM	1498	NH1	ARG	A	197	3.755	79.497	49.467	1.00	54.72	A
ATOM	1499	NH2	ARG	A	197	4.703	80.592	51.249	1.00	54.72	A
ATOM	1500	C	ARG	A	197	5.129	72.167	49.986	1.00	46.84	A
ATOM	1501	O	ARG	A	197	4.317	71.298	49.667	1.00	46.84	A
ATOM	1502	N	ILE	A	198	6.365	72.221	49.491	1.00	33.53	A
ATOM	1503	CA	ILE	A	198	6.876	71.260	48.508	1.00	33.53	A
ATOM	1504	CB	ILE	A	198	6.366	69.829	48.798	1.00	31.98	A
ATOM	1505	CG2	ILE	A	198	6.661	68.896	47.640	1.00	31.98	A
ATOM	1506	CG1	ILE	A	198	7.039	69.321	50.082	1.00	31.98	A
ATOM	1507	CD	ILE	A	198	7.115	67.786	50.217	1.00	31.98	A
ATOM	1508	C	ILE	A	198	6.472	71.698	47.114	1.00	33.53	A
ATOM	1509	O	ILE	A	198	6.077	70.905	46.284	1.00	33.53	A
ATOM	1510	N	TRP	A	199	6.622	72.991	46.875	1.00	100.07	A
ATOM	1511	CA	TRP	A	199	6.251	73.655	45.632	1.00	100.07	A
ATOM	1512	CB	TRP	A	199	7.323	74.658	45.251	1.00	99.57	A
ATOM	1513	CG	TRP	A	199	6.687	75.861	44.709	1.00	99.57	A
ATOM	1514	CD2	TRP	A	199	6.225	76.980	45.466	1.00	99.57	A
ATOM	1515	CE2	TRP	A	199	5.583	77.852	44.565	1.00	99.57	A
ATOM	1516	CE3	TRP	A	199	6.292	77.330	46.823	1.00	99.57	A
ATOM	1517	CD1	TRP	A	199	6.323	76.086	43.421	1.00	99.57	A
ATOM	1518	NE1	TRP	A	199	5.657	77.280	43.322	1.00	99.57	A
ATOM	1519	CZ2	TRP	A	199	5.005	79.064	44.976	1.00	99.57	A
ATOM	1520	CZ3	TRP	A	199	5.719	78.532	47.232	1.00	99.57	A
ATOM	1521	CH2	TRP	A	199	5.084	79.386	46.309	1.00	99.57	A
ATOM	1522	C	TRP	A	199	5.790	72.979	44.352	1.00	100.07	A
ATOM	1523	O	TRP	A	199	4.617	72.644	44.209	1.00	100.07	A
ATOM	1524	N	THR	A	200	6.692	72.835	43.391	1.00	68.48	A
ATOM	1525	CA	THR	A	200	6.319	72.236	42.111	1.00	68.48	A
ATOM	1526	CB	THR	A	200	6.737	73.178	40.936	1.00	87.15	A
ATOM	1527	OG1	THR	A	200	6.139	74.467	41.122	1.00	87.15	A
ATOM	1528	CG2	THR	A	200	6.291	72.627	39.594	1.00	87.15	A
ATOM	1529	C	THR	A	200	6.976	70.870	41.935	1.00	68.48	A
ATOM	1530	O	THR	A	200	7.706	70.386	42.806	1.00	68.48	A
ATOM	1531	N	ASP	A	201	6.692	70.252	40.800	1.00	31.77	A
ATOM	1532	CA	ASP	A	201	7.241	68.964	40.483	1.00	31.77	A
ATOM	1533	CB	ASP	A	201	6.380	67.867	41.088	1.00	88.26	A
ATOM	1534	CG	ASP	A	201	6.183	68.052	42.561	1.00	88.26	A
ATOM	1535	OD1	ASP	A	201	5.102	68.533	42.952	1.00	88.26	A
ATOM	1536	OD2	ASP	A	201	7.117	67.738	43.327	1.00	88.26	A
ATOM	1537	C	ASP	A	201	7.385	68.754	38.980	1.00	31.77	A
ATOM	1538	O	ASP	A	201	6.566	69.236	38.169	1.00	31.77	A
ATOM	1539	N	GLY	A	202	8.463	68.059	38.618	1.00	58.84	A
ATOM	1540	CA	GLY	A	202	8.681	67.736	37.230	1.00	58.84	A
ATOM	1541	C	GLY	A	202	7.467	66.868	36.954	1.00	58.84	A
ATOM	1542	O	GLY	A	202	6.430	67.366	36.485	1.00	58.84	A
ATOM	1543	N	SER	A	203	7.580	65.581	37.302	1.00	66.27	A
ATOM	1544	CA	SER	A	203	6.497	64.618	37.102	1.00	66.27	A
ATOM	1545	CB	SER	A	203	7.030	63.309	36.511	1.00	89.23	A
ATOM	1546	OG	SER	A	203	7.849	62.622	37.432	1.00	89.23	A
ATOM	1547	C	SER	A	203	5.691	64.315	38.366	1.00	66.27	A
ATOM	1548	O	SER	A	203	4.597	64.856	38.530	1.00	66.27	A
ATOM	1549	N	VAL	A	204	6.243	63.465	39.243	1.00	42.74	A
ATOM	1550	CA	VAL	A	204	5.610	63.032	40.508	1.00	42.74	A
ATOM	1551	CB	VAL	A	204	6.607	62.209	41.417	1.00	21.15	A
ATOM	1552	CG1	VAL	A	204	7.944	62.046	40.738	1.00	21.15	A
ATOM	1553	CG2	VAL	A	204	6.793	62.879	42.764	1.00	21.15	A
ATOM	1554	C	VAL	A	204	4.972	64.117	41.390	1.00	42.74	A
ATOM	1555	O	VAL	A	204	5.099	65.314	41.127	1.00	42.74	A
ATOM	1556	N	THR	A	205	4.293	63.684	42.452	1.00	21.70	A
ATOM	1557	CA	THR	A	205	3.617	64.619	43.348	1.00	21.70	A
ATOM	1558	CB	THR	A	205	2.108	64.347	43.399	1.00	74.21	A

ATOM	1559	OG1	THR	A	205	1.876	63.080	44.030	1.00	74.21	A
ATOM	1560	CG2	THR	A	205	1.521	64.351	41.985	1.00	74.21	A
ATOM	1561	C	THR	A	205	4.120	64.675	44.794	1.00	21.70	A
ATOM	1562	O	THR	A	205	4.462	63.656	45.402	1.00	21.70	A
ATOM	1563	N	PRO	A	206	4.121	65.890	45.368	1.00	17.57	A
ATOM	1564	CD	PRO	A	206	3.336	67.024	44.848	1.00	23.29	A
ATOM	1565	CA	PRO	A	206	4.563	66.175	46.725	1.00	17.57	A
ATOM	1566	CB	PRO	A	206	3.730	67.384	47.102	1.00	23.29	A
ATOM	1567	CG	PRO	A	206	3.667	68.108	45.834	1.00	23.29	A
ATOM	1568	C	PRO	A	206	4.290	65.002	47.621	1.00	17.57	A
ATOM	1569	O	PRO	A	206	5.221	64.344	48.070	1.00	17.57	A
ATOM	1570	N	LEU	A	207	3.012	64.740	47.883	1.00	66.62	A
ATOM	1571	CA	LEU	A	207	2.637	63.621	48.739	1.00	66.62	A
ATOM	1572	CB	LEU	A	207	1.264	63.075	48.348	1.00	100.07	A
ATOM	1573	CG	LEU	A	207	0.807	61.885	49.197	1.00	100.07	A
ATOM	1574	CD1	LEU	A	207	0.394	62.392	50.572	1.00	100.07	A
ATOM	1575	CD2	LEU	A	207	-0.347	61.153	48.516	1.00	100.07	A
ATOM	1576	C	LEU	A	207	3.677	62.516	48.567	1.00	66.62	A
ATOM	1577	O	LEU	A	207	4.303	62.063	49.533	1.00	66.62	A
ATOM	1578	N	GLU	A	208	3.861	62.104	47.316	1.00	83.94	A
ATOM	1579	CA	GLU	A	208	4.828	61.073	46.987	1.00	83.94	A
ATOM	1580	CB	GLU	A	208	4.791	60.763	45.484	1.00	86.72	A
ATOM	1581	CG	GLU	A	208	3.448	60.239	44.974	1.00	86.72	A
ATOM	1582	CD	GLU	A	208	3.461	59.883	43.485	1.00	86.72	A
ATOM	1583	OE1	GLU	A	208	4.193	58.946	43.086	1.00	86.72	A
ATOM	1584	OE2	GLU	A	208	2.729	60.544	42.715	1.00	86.72	A
ATOM	1585	C	GLU	A	208	6.223	61.548	47.386	1.00	83.94	A
ATOM	1586	O	GLU	A	208	6.928	60.855	48.120	1.00	83.94	A
ATOM	1587	N	ALA	A	209	6.613	62.732	46.906	1.00	96.12	A
ATOM	1588	CA	ALA	A	209	7.929	63.298	47.221	1.00	96.12	A
ATOM	1589	CB	ALA	A	209	8.053	64.748	46.668	1.00	27.97	A
ATOM	1590	C	ALA	A	209	8.153	63.282	48.735	1.00	96.12	A
ATOM	1591	O	ALA	A	209	9.192	62.824	49.213	1.00	96.12	A
ATOM	1592	N	LEU	A	210	7.165	63.771	49.480	1.00	44.94	A
ATOM	1593	CA	LEU	A	210	7.227	63.812	50.934	1.00	44.94	A
ATOM	1594	CB	LEU	A	210	5.929	64.413	51.482	1.00	31.43	A
ATOM	1595	CG	LEU	A	210	5.568	64.066	52.931	1.00	31.43	A
ATOM	1596	CD1	LEU	A	210	6.619	64.625	53.863	1.00	31.43	A
ATOM	1597	CD2	LEU	A	210	4.174	64.600	53.278	1.00	31.43	A
ATOM	1598	C	LEU	A	210	7.464	62.430	51.554	1.00	44.94	A
ATOM	1599	O	LEU	A	210	8.495	62.197	52.201	1.00	44.94	A
ATOM	1600	N	ASN	A	211	6.508	61.519	51.374	1.00	100.07	A
ATOM	1601	CA	ASN	A	211	6.648	60.172	51.927	1.00	100.07	A
ATOM	1602	CB	ASN	A	211	5.497	59.264	51.479	1.00	100.07	A
ATOM	1603	CG	ASN	A	211	4.154	59.701	52.033	1.00	100.07	A
ATOM	1604	OD1	ASN	A	211	3.527	60.633	51.527	1.00	100.07	A
ATOM	1605	ND2	ASN	A	211	3.711	59.030	53.089	1.00	100.07	A
ATOM	1606	C	ASN	A	211	7.959	59.609	51.412	1.00	100.07	A
ATOM	1607	O	ASN	A	211	8.701	58.944	52.137	1.00	100.07	A
ATOM	1608	N	GLN	A	212	8.233	59.883	50.144	1.00	85.92	A
ATOM	1609	CA	GLN	A	212	9.457	59.426	49.522	1.00	85.92	A
ATOM	1610	CB	GLN	A	212	9.571	60.013	48.120	1.00	100.07	A
ATOM	1611	CG	GLN	A	212	10.776	59.549	47.342	1.00	100.07	A
ATOM	1612	CD	GLN	A	212	10.393	58.736	46.124	1.00	100.07	A
ATOM	1613	OE1	GLN	A	212	9.550	59.151	45.323	1.00	100.07	A
ATOM	1614	NE2	GLN	A	212	11.016	57.571	45.971	1.00	100.07	A
ATOM	1615	C	GLN	A	212	10.605	59.930	50.382	1.00	85.92	A
ATOM	1616	O	GLN	A	212	11.534	59.186	50.703	1.00	85.92	A
ATOM	1617	N	ALA	A	213	10.516	61.200	50.768	1.00	41.35	A
ATOM	1618	CA	ALA	A	213	11.546	61.840	51.581	1.00	41.35	A
ATOM	1619	CB	ALA	A	213	11.154	63.271	51.881	1.00	45.50	A
ATOM	1620	C	ALA	A	213	11.828	61.112	52.883	1.00	41.35	A
ATOM	1621	O	ALA	A	213	12.922	60.579	53.088	1.00	41.35	A
ATOM	1622	N	VAL	A	214	10.829	61.112	53.761	1.00	83.40	A
ATOM	1623	CA	VAL	A	214	10.925	60.472	55.069	1.00	83.40	A
ATOM	1624	CB	VAL	A	214	9.521	60.254	55.678	1.00	48.39	A
ATOM	1625	CG1	VAL	A	214	9.196	61.363	56.670	1.00	48.39	A
ATOM	1626	CG2	VAL	A	214	8.486	60.244	54.582	1.00	48.39	A
ATOM	1627	C	VAL	A	214	11.650	59.136	55.029	1.00	83.40	A
ATOM	1628	O	VAL	A	214	12.493	58.839	55.881	1.00	83.40	A
ATOM	1629	N	ALA	A	215	11.311	58.339	54.026	1.00	68.64	A
ATOM	1630	CA	ALA	A	215	11.905	57.024	53.843	1.00	68.64	A
ATOM	1631	CB	ALA	A	215	11.617	56.527	52.434	1.00	100.07	A
ATOM	1632	C	ALA	A	215	13.401	57.036	54.093	1.00	68.64	A
ATOM	1633	O	ALA	A	215	13.874	56.577	55.129	1.00	68.64	A
ATOM	1634	N	ILE	A	216	14.136	57.576	53.129	1.00	99.55	A
ATOM	1635	CA	ILE	A	216	15.585	57.651	53.204	1.00	99.55	A
ATOM	1636	CB	ILE	A	216	16.104	58.623	52.160	1.00	59.90	A
ATOM	1637	CG2	ILE	A	216	17.570	58.348	51.892	1.00	59.90	A
ATOM	1638	CG1	ILE	A	216	15.296	58.447	50.872	1.00	59.90	A
ATOM	1639	CD	ILE	A	216	15.592	59.487	49.835	1.00	59.90	A
ATOM	1640	C	ILE	A	216	16.060	58.067	54.590	1.00	99.55	A
ATOM	1641	O	ILE	A	216	16.869	57.375	55.208	1.00	99.55	A
ATOM	1642	N	LEU	A	217	15.547	59.193	55.074	1.00	64.91	A

ATOM	1643	CA	LEU	A	217	15.903	59.698	56.394	1.00	64.91	A
ATOM	1644	CB	LEU	A	217	14.980	60.861	56.762	1.00	37.93	A
ATOM	1645	CG	LEU	A	217	14.969	61.401	58.195	1.00	37.93	A
ATOM	1646	CD1	LEU	A	217	16.343	61.850	58.656	1.00	37.93	A
ATOM	1647	CD2	LEU	A	217	14.007	62.561	58.228	1.00	37.93	A
ATOM	1648	C	LEU	A	217	15.729	58.560	57.387	1.00	64.91	A
ATOM	1649	O	LEU	A	217	16.632	58.242	58.164	1.00	64.91	A
ATOM	1650	N	LYS	A	218	14.558	57.939	57.345	1.00	40.33	A
ATOM	1651	CA	LYS	A	218	14.264	56.828	58.236	1.00	40.33	A
ATOM	1652	CB	LYS	A	218	12.867	56.267	57.932	1.00	100.07	A
ATOM	1653	CG	LYS	A	218	12.883	55.002	57.080	1.00	100.07	A
ATOM	1654	CD	LYS	A	218	11.633	54.839	56.237	1.00	100.07	A
ATOM	1655	CE	LYS	A	218	11.820	53.728	55.201	1.00	100.07	A
ATOM	1656	NZ	LYS	A	218	10.636	53.558	54.307	1.00	100.07	A
ATOM	1657	C	LYS	A	218	15.313	55.737	58.027	1.00	40.33	A
ATOM	1658	O	LYS	A	218	15.919	55.237	58.980	1.00	40.33	A
ATOM	1659	N	GLU	A	219	15.509	55.399	56.752	1.00	47.87	A
ATOM	1660	CA	GLU	A	219	16.434	54.370	56.286	1.00	47.87	A
ATOM	1661	CB	GLU	A	219	16.394	54.331	54.759	1.00	87.82	A
ATOM	1662	CG	GLU	A	219	17.156	53.201	54.110	1.00	87.82	A
ATOM	1663	CD	GLU	A	219	16.986	53.206	52.595	1.00	87.82	A
ATOM	1664	OE1	GLU	A	219	15.837	53.058	52.115	1.00	87.82	A
ATOM	1665	OE2	GLU	A	219	18.000	53.364	51.882	1.00	87.82	A
ATOM	1666	C	GLU	A	219	17.852	54.641	56.762	1.00	47.87	A
ATOM	1667	O	GLU	A	219	18.588	53.716	57.096	1.00	47.87	A
ATOM	1668	N	HIS	A	220	18.239	55.912	56.779	1.00	65.57	A
ATOM	1669	CA	HIS	A	220	19.570	56.281	57.237	1.00	65.57	A
ATOM	1670	CB	HIS	A	220	19.877	57.739	56.929	1.00	34.75	A
ATOM	1671	CG	HIS	A	220	20.172	58.005	55.489	1.00	34.75	A
ATOM	1672	CD2	HIS	A	220	19.422	58.576	54.516	1.00	34.75	A
ATOM	1673	ND1	HIS	A	220	21.384	57.700	54.912	1.00	34.75	A
ATOM	1674	CE1	HIS	A	220	21.369	58.076	53.645	1.00	34.75	A
ATOM	1675	NE2	HIS	A	220	20.191	58.611	53.380	1.00	34.75	A
ATOM	1676	C	HIS	A	220	19.613	56.090	58.735	1.00	65.57	A
ATOM	1677	O	HIS	A	220	20.464	55.380	59.255	1.00	65.57	A
ATOM	1678	N	LEU	A	221	18.688	56.748	59.422	1.00	50.48	A
ATOM	1679	CA	LEU	A	221	18.591	56.645	60.869	1.00	50.48	A
ATOM	1680	CB	LEU	A	221	17.158	56.994	61.308	1.00	48.41	A
ATOM	1681	CG	LEU	A	221	16.772	58.342	61.941	1.00	48.41	A
ATOM	1682	CD1	LEU	A	221	17.653	58.559	63.162	1.00	48.41	A
ATOM	1683	CD2	LEU	A	221	16.900	59.501	60.954	1.00	48.41	A
ATOM	1684	C	LEU	A	221	18.941	55.227	61.336	1.00	50.48	A
ATOM	1685	O	LEU	A	221	19.723	55.030	62.272	1.00	50.48	A
ATOM	1686	N	ASN	A	222	18.359	54.238	60.666	1.00	79.78	A
ATOM	1687	CA	ASN	A	222	18.589	52.845	61.014	1.00	79.78	A
ATOM	1688	CB	ASN	A	222	17.833	51.948	60.042	1.00	64.26	A
ATOM	1689	CG	ASN	A	222	16.330	52.115	60.167	1.00	64.26	A
ATOM	1690	OD1	ASN	A	222	15.777	52.007	61.261	1.00	64.26	A
ATOM	1691	ND2	ASN	A	222	15.662	52.381	59.050	1.00	64.26	A
ATOM	1692	C	ASN	A	222	20.057	52.466	61.093	1.00	79.78	A
ATOM	1693	O	ASN	A	222	20.462	51.742	61.995	1.00	79.78	A
ATOM	1694	N	TYR	A	223	20.859	52.971	60.166	1.00	81.32	A
ATOM	1695	CA	TYR	A	223	22.280	52.670	60.169	1.00	81.32	A
ATOM	1696	CB	TYR	A	223	23.029	53.617	59.234	1.00	81.85	A
ATOM	1697	CG	TYR	A	223	22.680	53.484	57.769	1.00	81.85	A
ATOM	1698	CD1	TYR	A	223	22.719	52.249	57.137	1.00	81.85	A
ATOM	1699	CE1	TYR	A	223	22.450	52.132	55.795	1.00	81.85	A
ATOM	1700	CD2	TYR	A	223	22.357	54.606	57.009	1.00	81.85	A
ATOM	1701	CE2	TYR	A	223	22.087	54.502	55.669	1.00	81.85	A
ATOM	1702	CZ	TYR	A	223	22.135	53.261	55.064	1.00	81.85	A
ATOM	1703	OH	TYR	A	223	21.868	53.139	53.719	1.00	81.85	A
ATOM	1704	C	TYR	A	223	22.867	52.786	61.574	1.00	81.32	A
ATOM	1705	O	TYR	A	223	23.876	52.152	61.874	1.00	81.32	A
ATOM	1706	N	PHE	A	224	22.243	53.589	62.436	1.00	65.20	A
ATOM	1707	CA	PHE	A	224	22.755	53.765	63.799	1.00	65.20	A
ATOM	1708	CB	PHE	A	224	22.110	54.988	64.473	1.00	70.91	A
ATOM	1709	CG	PHE	A	224	22.403	56.303	63.781	1.00	70.91	A
ATOM	1710	CD1	PHE	A	224	21.497	56.852	62.880	1.00	70.91	A
ATOM	1711	CD2	PHE	A	224	23.596	56.977	64.015	1.00	70.91	A
ATOM	1712	CE1	PHE	A	224	21.772	58.043	62.224	1.00	70.91	A
ATOM	1713	CE2	PHE	A	224	23.878	58.168	63.362	1.00	70.91	A
ATOM	1714	CZ	PHE	A	224	22.962	58.701	62.463	1.00	70.91	A
ATOM	1715	C	PHE	A	224	22.515	52.510	64.644	1.00	65.20	A
ATOM	1716	O	PHE	A	224	22.260	52.576	65.850	1.00	65.20	A
ATOM	1717	N	ALA	A	225	22.621	51.362	63.987	1.00	42.35	A
ATOM	1718	CA	ALA	A	225	22.412	50.070	64.618	1.00	42.35	A
ATOM	1719	CB	ALA	A	225	22.202	49.004	63.547	1.00	100.07	A
ATOM	1720	C	ALA	A	225	23.563	49.668	65.522	1.00	42.35	A
ATOM	1721	O	ALA	A	225	24.054	50.485	66.297	1.00	42.35	A
ATOM	1722	N	ASN	A	226	23.981	48.404	65.421	1.00	61.29	A
ATOM	1723	CA	ASN	A	226	25.074	47.880	66.240	1.00	61.29	A
ATOM	1724	CB	ASN	A	226	25.162	46.352	66.127	1.00	100.07	A
ATOM	1725	CG	ASN	A	226	24.423	45.635	67.257	1.00	100.07	A
ATOM	1726	OD1	ASN	A	226	24.404	44.402	67.322	1.00	100.07	A